

homepilot

Your home in the palm of your hand



homepilot

A Midpoint Proposal by Adalene Teh (03771764)

Graduate School of Web Design & New Media

Date of presentation: xx/xx/2014 Time of Presentation: xx:00 PM

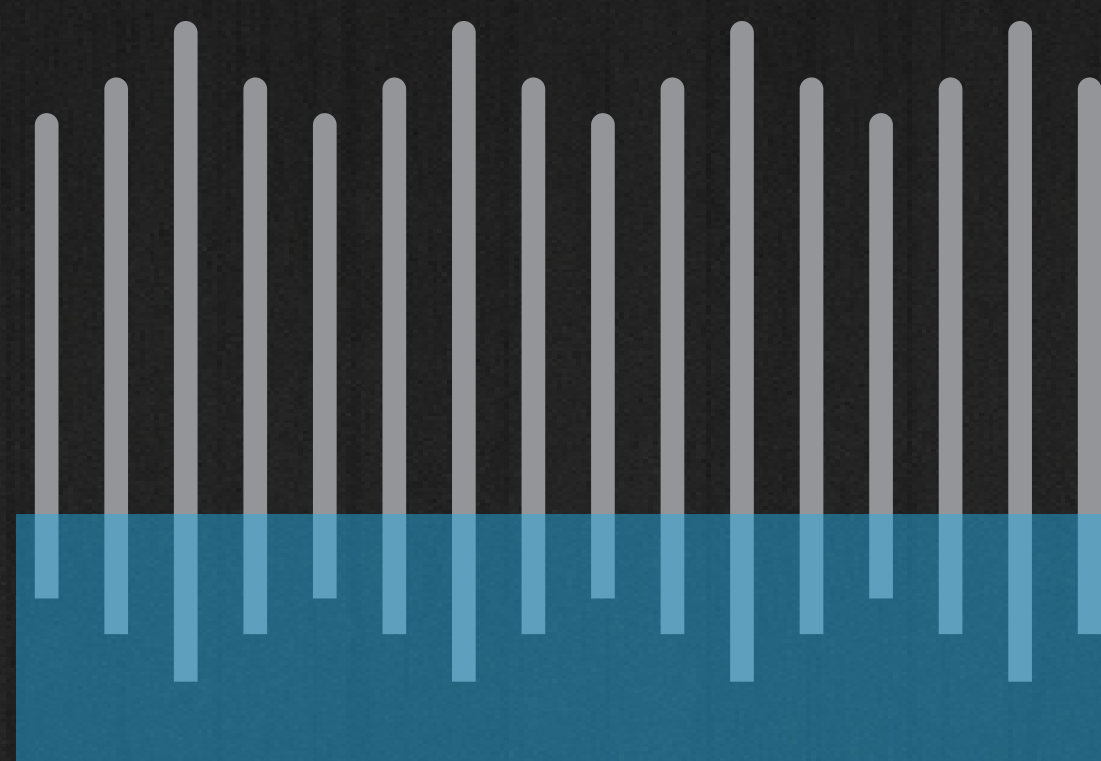
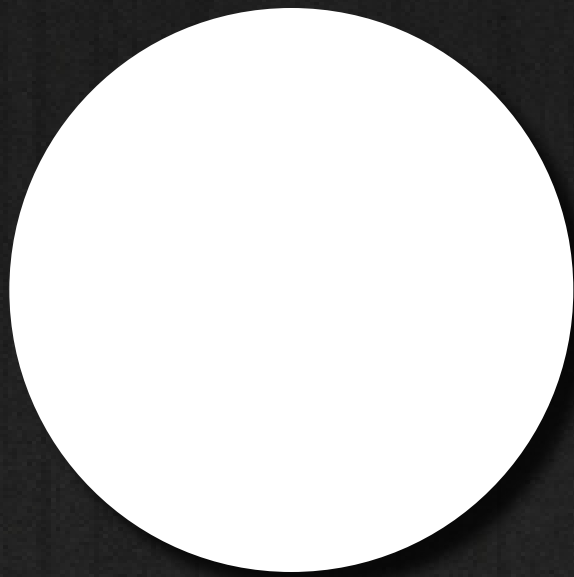


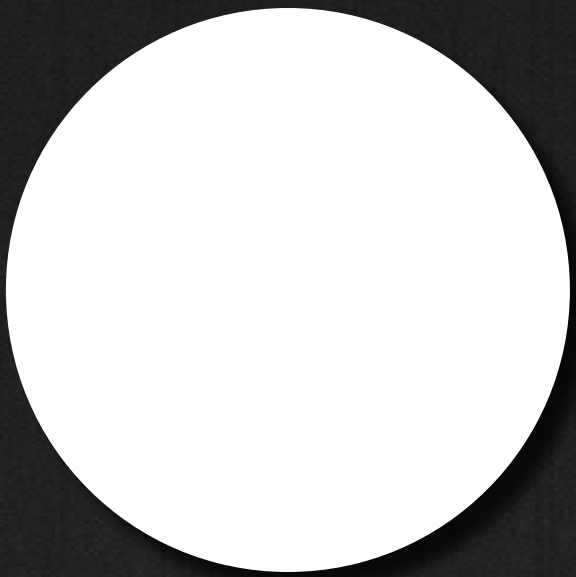
TABLE OF CONTENTS

TABLE OF CONTENTS



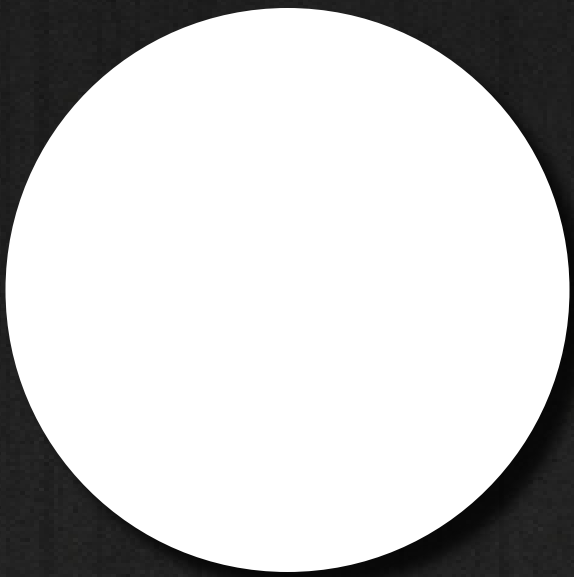
Biography

- 00 -



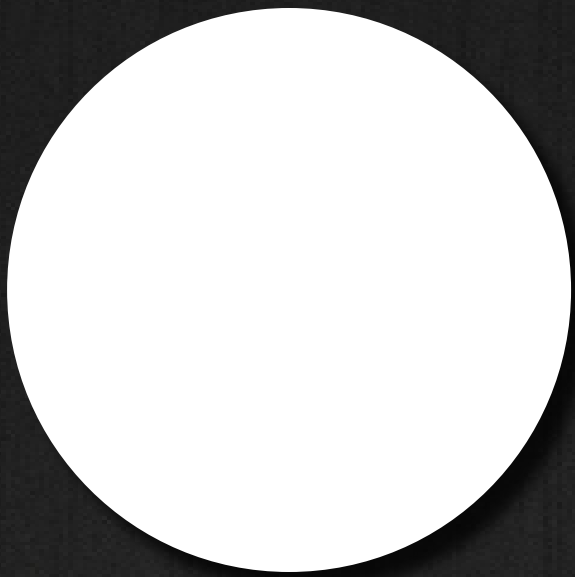
Resume

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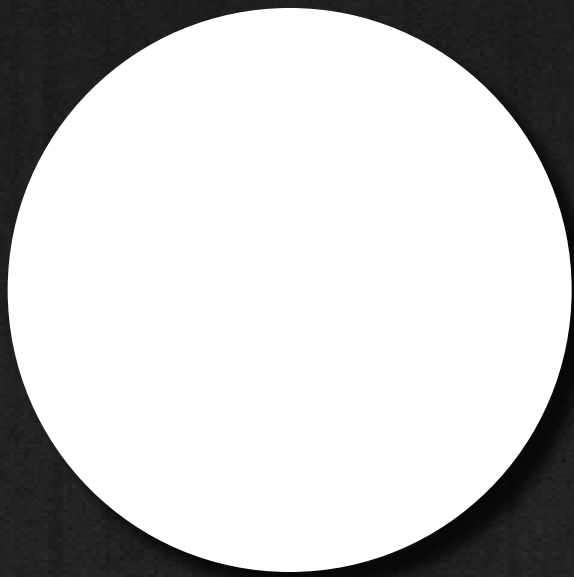
Portfolio

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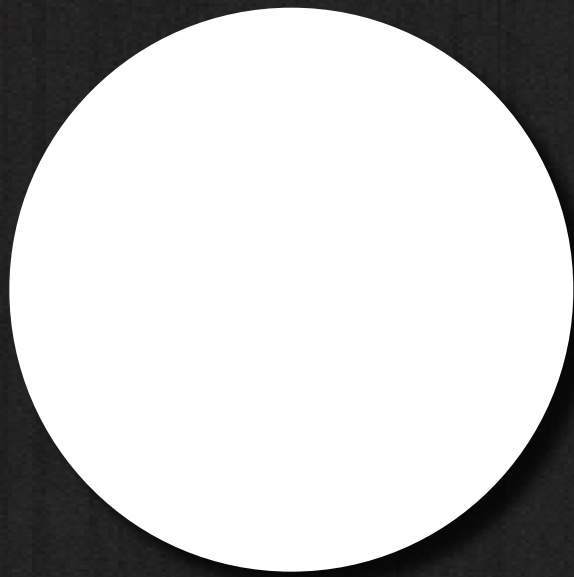
Thesis Abstract

- 00 -



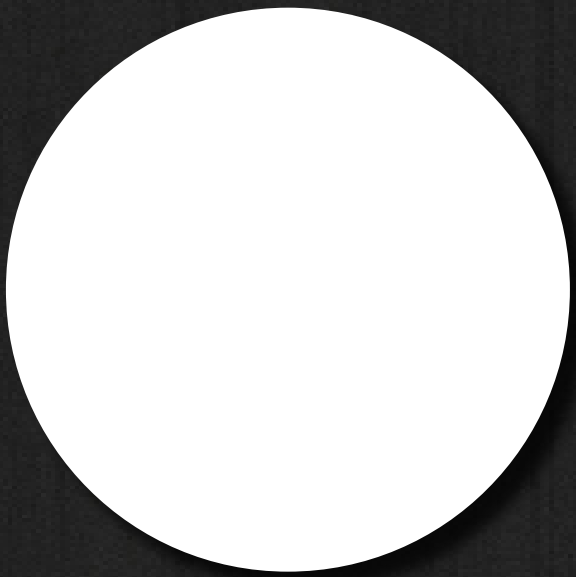
Statement of Interest

- 00 -



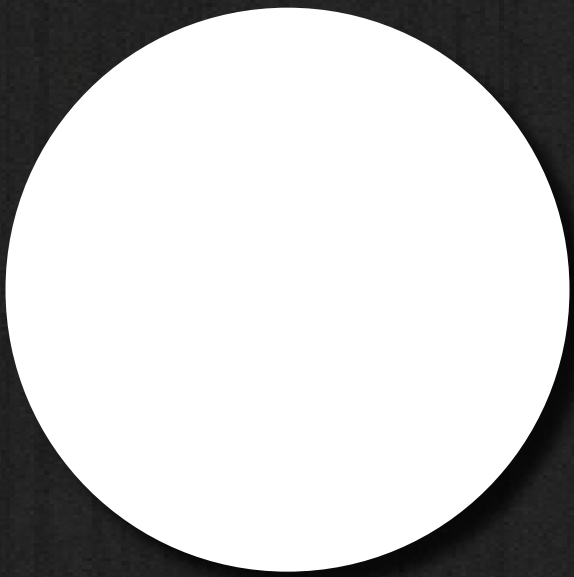
Influences

- 00 -



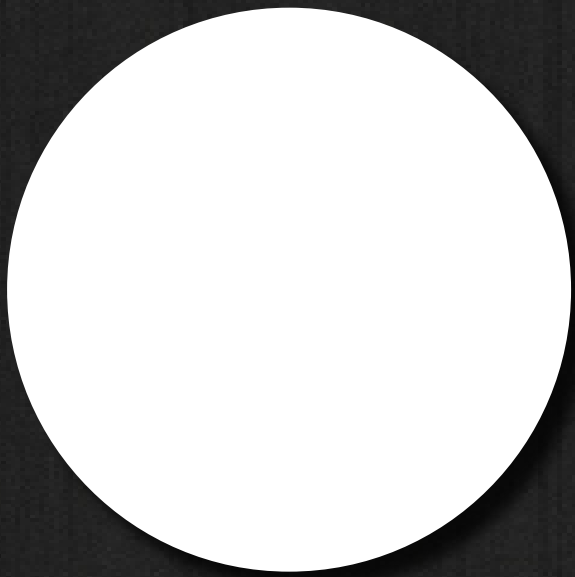
Thesis Project
Proposal

- 00 -



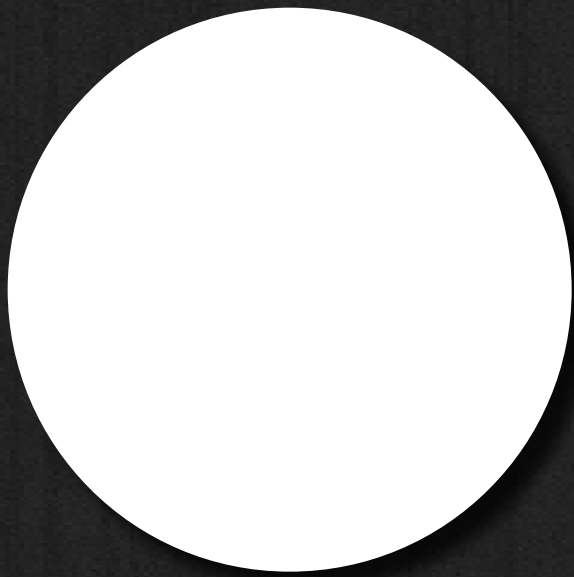
Market Research

- 00 -



Competitors

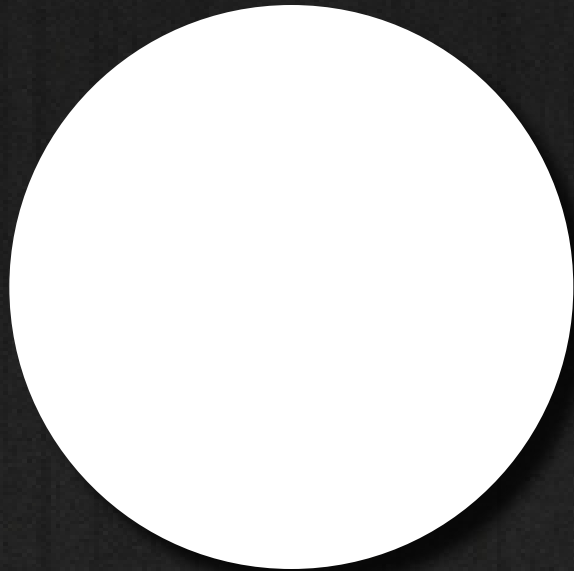
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Competitive Analysis

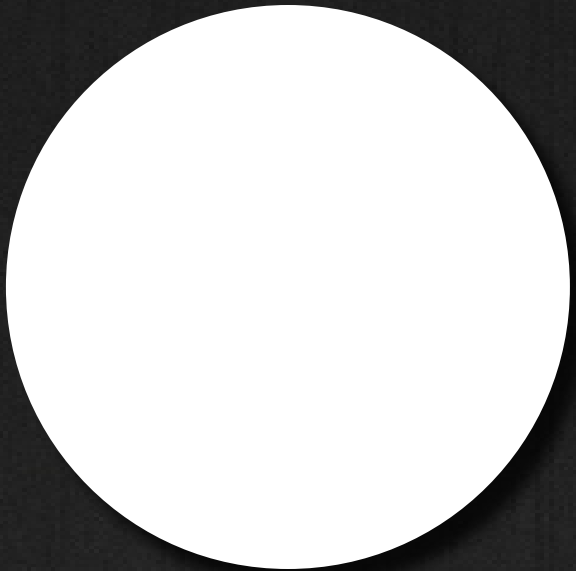
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TABLE OF CONTENTS



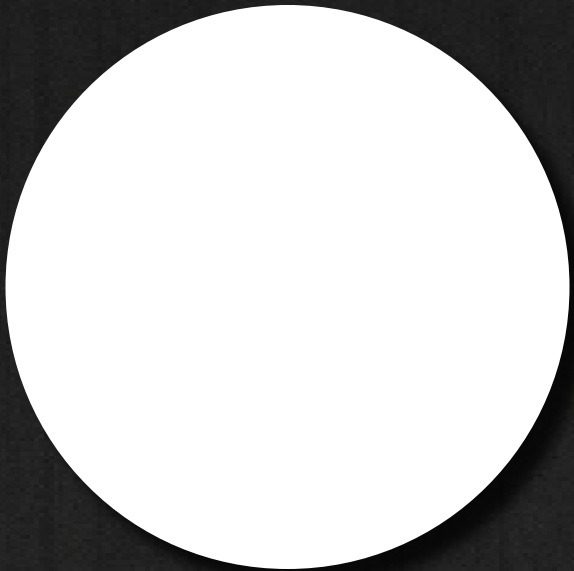
Target Audience

- 00 -



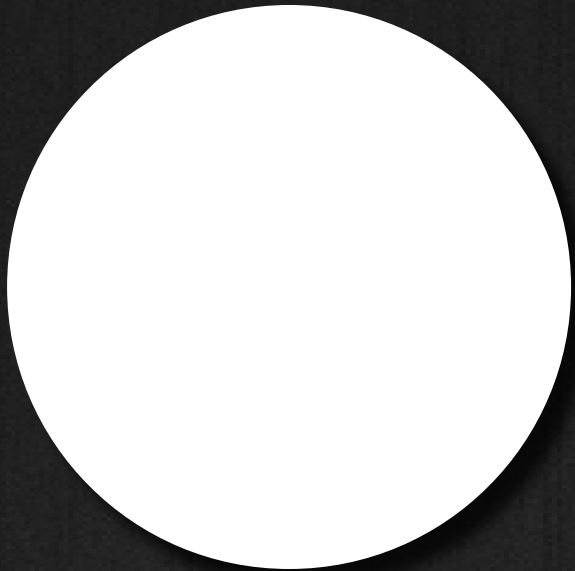
User Personas

- 00 -



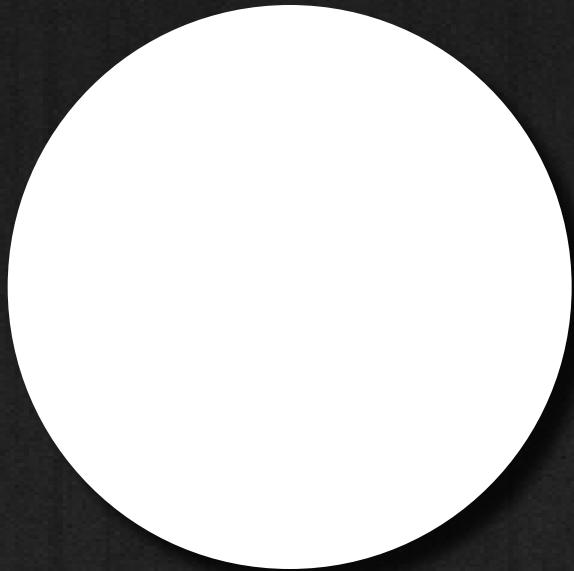
Technical
Specifications

- 00 -



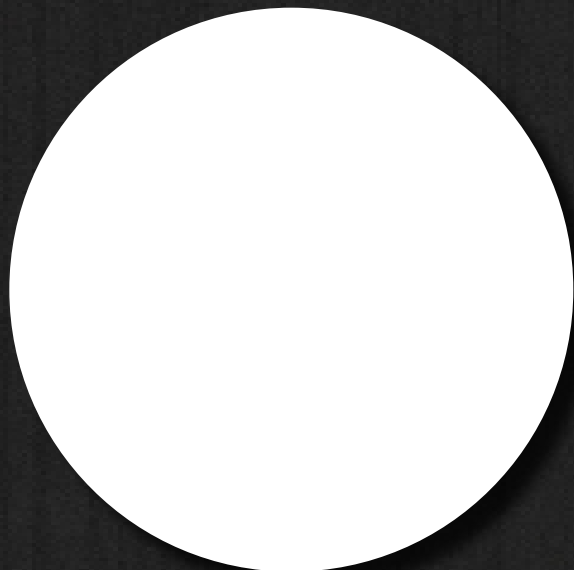
Final Deliverables

- 00 -



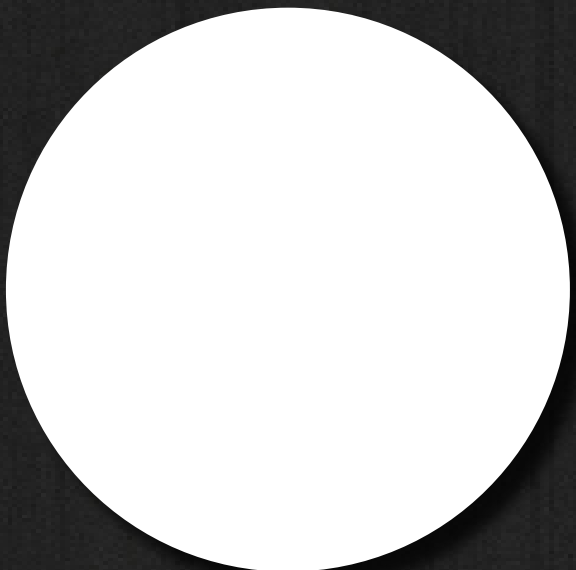
Wireframes

- 00 -



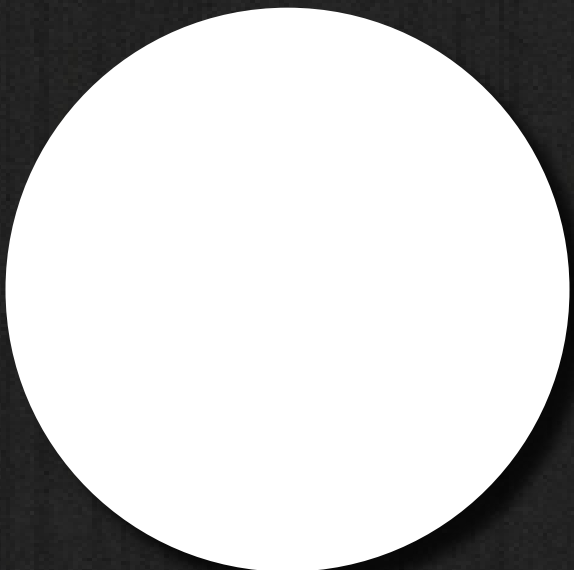
Proof of Concept

- 00 -



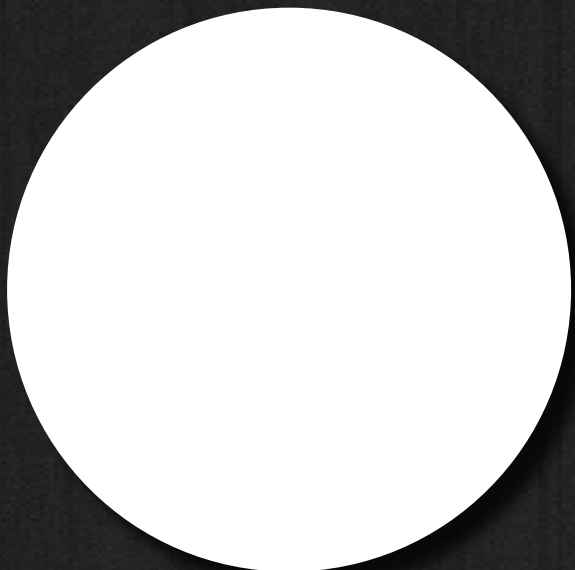
Visual Design

- 00 -



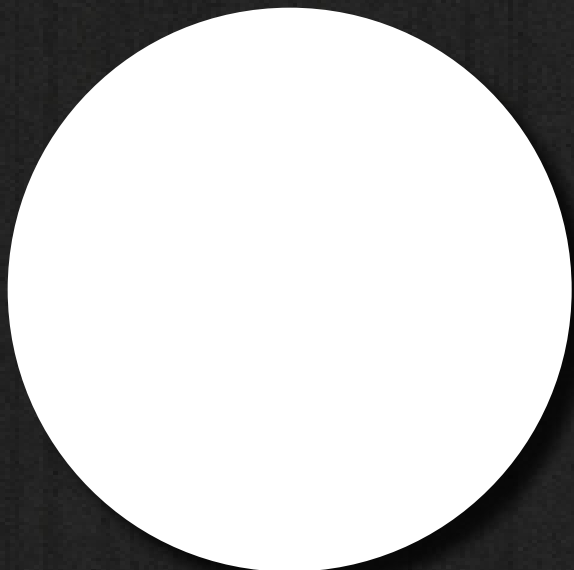
Timeline

- 00 -



Bibliography

- 00 -



Conclusion

- 00 -

Biography



This is about Adalene's background and education.

Adalene Teh

Designer / Student

+1(415)608-6021 - san francisco, ca 94133
bant339@gmail.com - www.adalenes.com



Biography

Hello! My name is Adalene.

I was raised up in Malaysia. I took my Visual Communication Degree in Taiwan. After graduated, I moved to Singapore for working as a graphic designer. But now, I live in San Francisco for the master degree in Web Design and New Media.

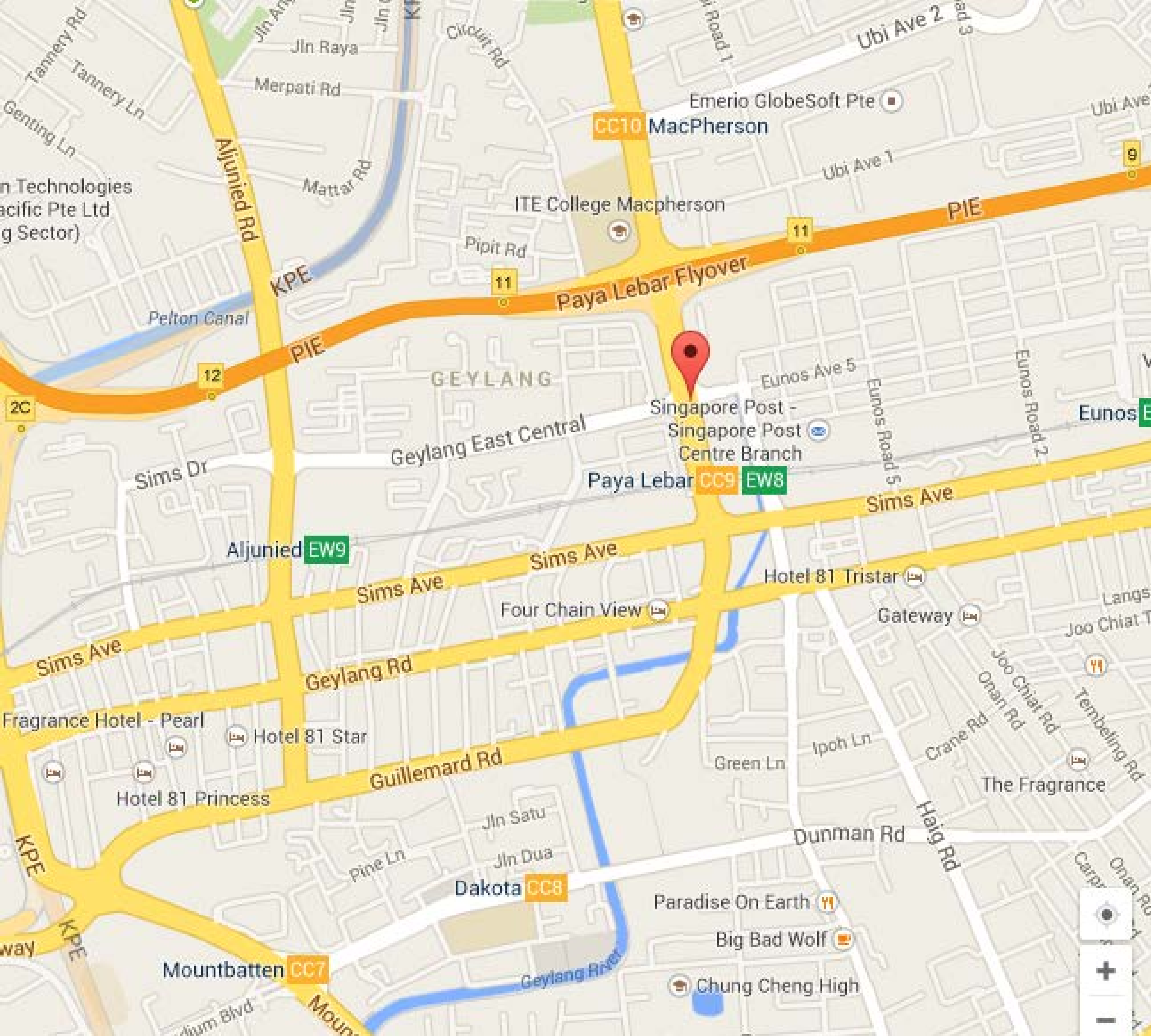
Bold, pure, simple and clean style reflects the nature and minimalistic designs of my work of art. I have a passion for everything related to art, but I hope it could be more connecting with technology because it would be fun and interesting as well as sharing it with people. I also like every kind of gadgetry because it's small idea but big changed and it makes our life easier. I hope my artworks can help many people in the future.

I was born in Malaysia



Studied at Yuntech University for Visual Communication Design in Taiwan





Worked at
Singapore as a
graphic designer

Education

Master of Fine Art in Web Design and New Media

Academy of Art University - San Francisco Bay Area, CA
2013 to 2015 (still on going)

Bachelor in Visual Communication Design

National Yunlin University of Science and Technology, Taiwan
June 2011

Skills

HTML, CSS, JAVASCRIPTS, JQuery, API, User Experience, Graphic Design, Typography, Printing, Packaging, Corporate Identity System, Concept Developmen

Software: Adobe Illustrator, Photoshop, InDesign, After Effect, Dreamweaver

Resume



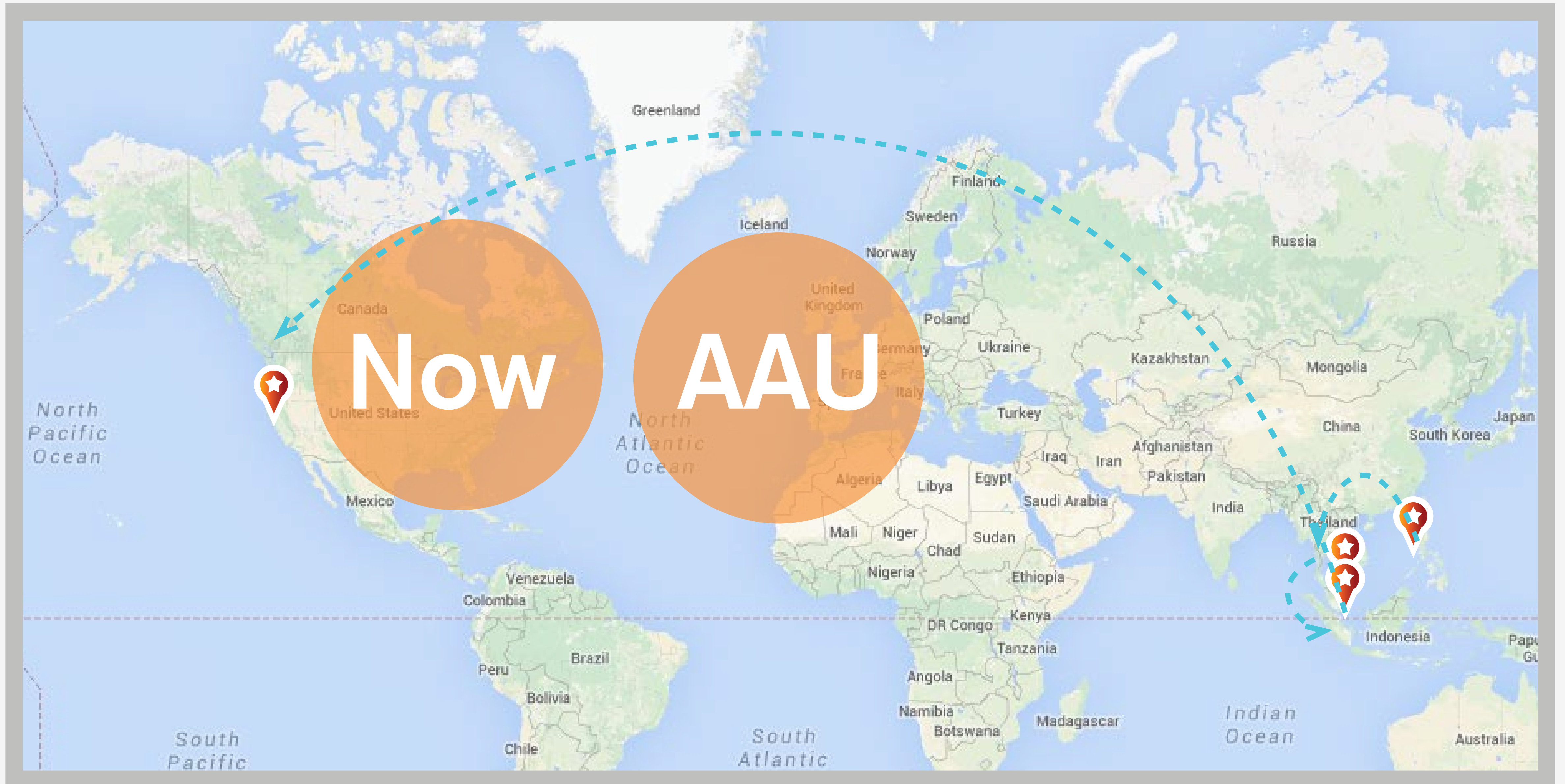
This something about Adalene's
working experiences

Working Experience

Graphic Designer - Lifestream Group Pte Ltd
Design Executive - The Eighth National Education Conference
Officer-in-Charge General Affairs - NYUST Association of International Student
Design Executive - Pixel Design and Marketing SDN BHD
Internship as a graphic designer- Colorganda Branding & Design Company

Exhibitions Experience

Date	Location	Organizers	Executive Organizers	Exhibitions	Title
Dec 2007	HAM Gallery in Taiwan	Hugo Garden	Hugo Garden	Island tour	When Indian Meet With Corba
May 2011	TWTC Exhibition Hall inTaiwan	Industrial Development Bureau, Ministry of Economic Affairs	Taiwan Design Center, Taiwan Design Alliance	2011 Young Designer's	Encanto : Explore The World Of Viruses
OCT 2011	TWTC Exhibition Hall in Taiwan	Ministry of Economic Affairs, Taipei City Government	Taiwan Design Center, Taiwan Design Alliance	2011 Ida Congress Taipei (International Design Alliance)	Encanto : Explore The World Of Viruses



Portfolio



The are artworks from New Media
Department.

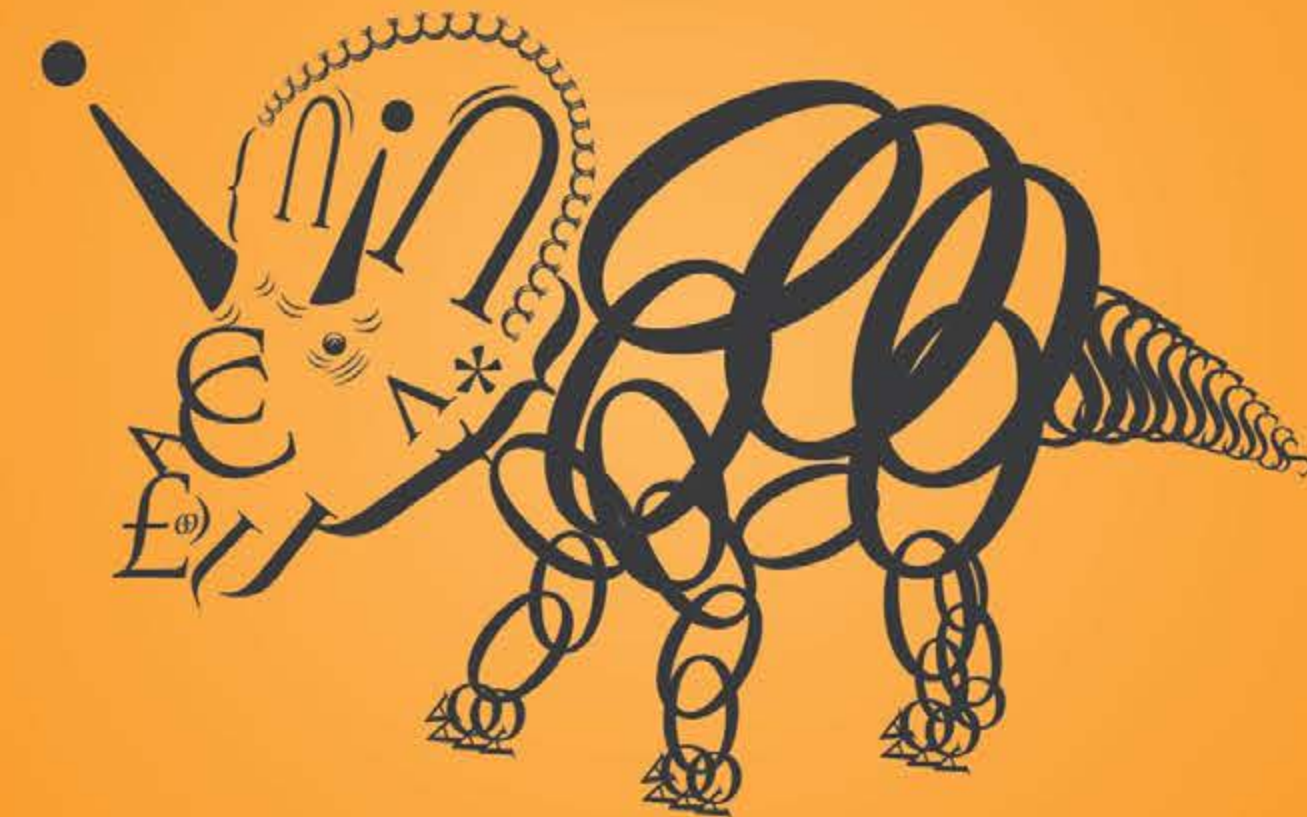
WNM 605

Typography for Digital Masters

Project:

Software:

Instructor:



TOROSAURUS

I AM TRAJAN PRO

WNM 605

Typography for Digital Masters

Project:

Software:

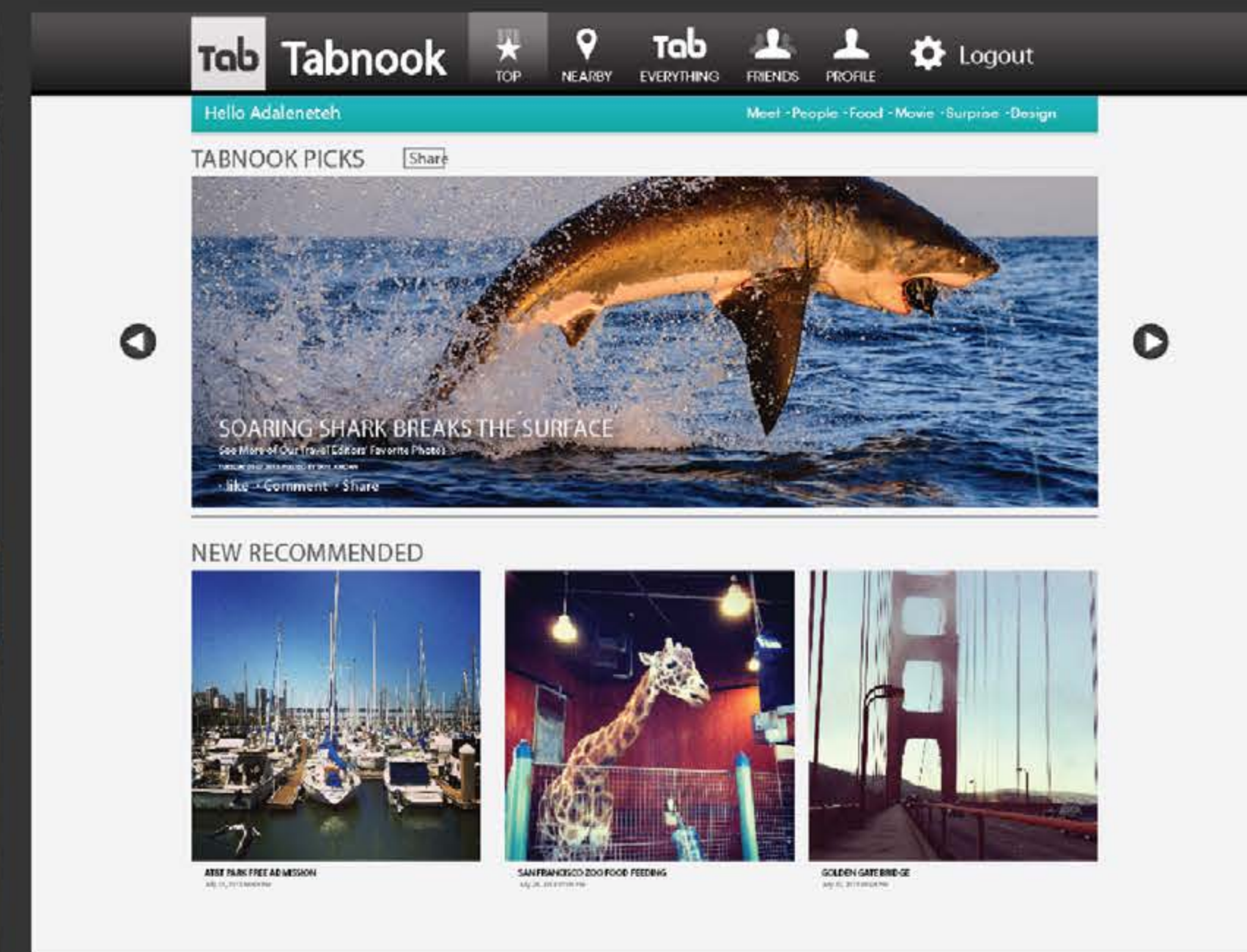
Instructor:

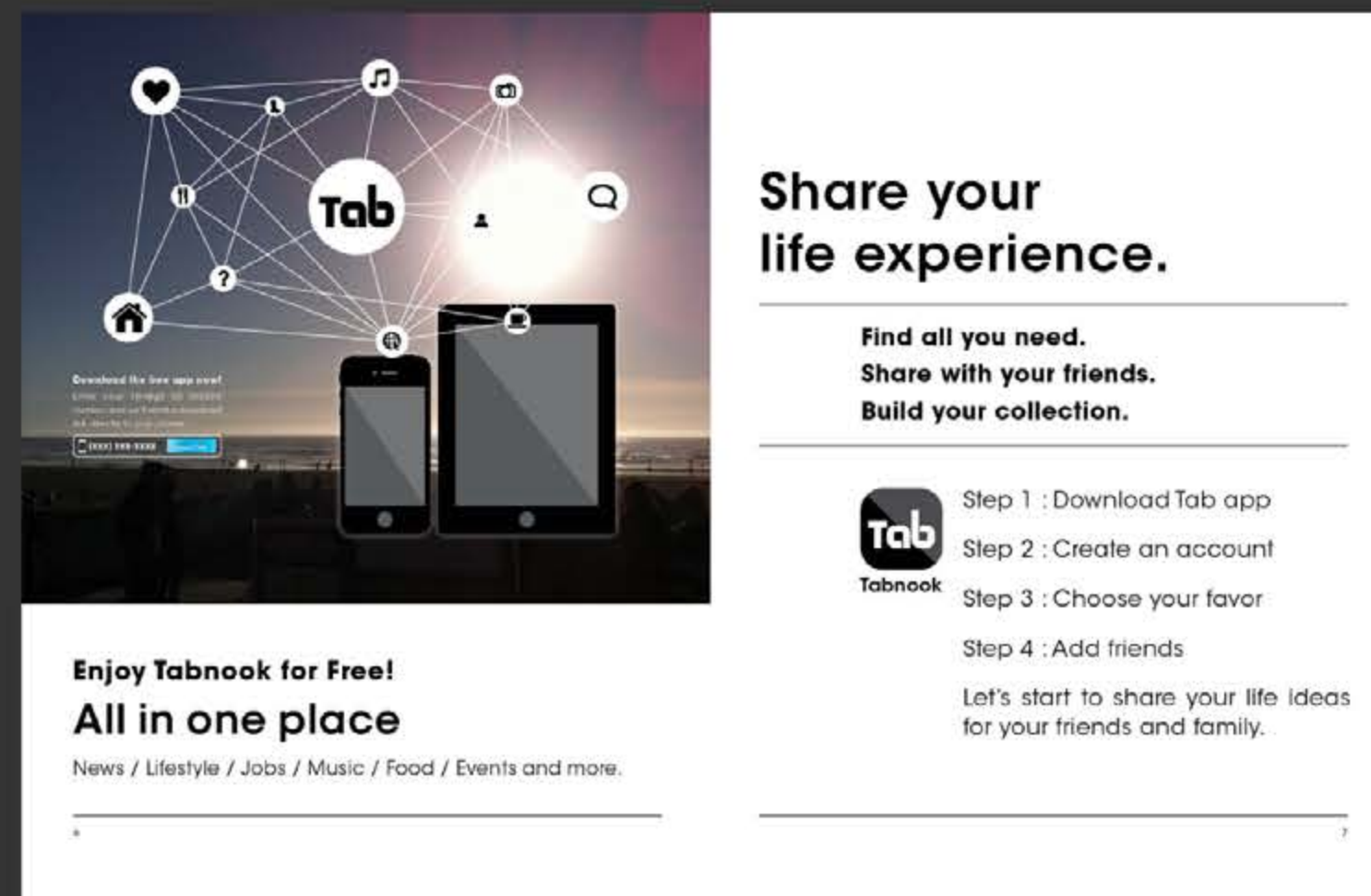
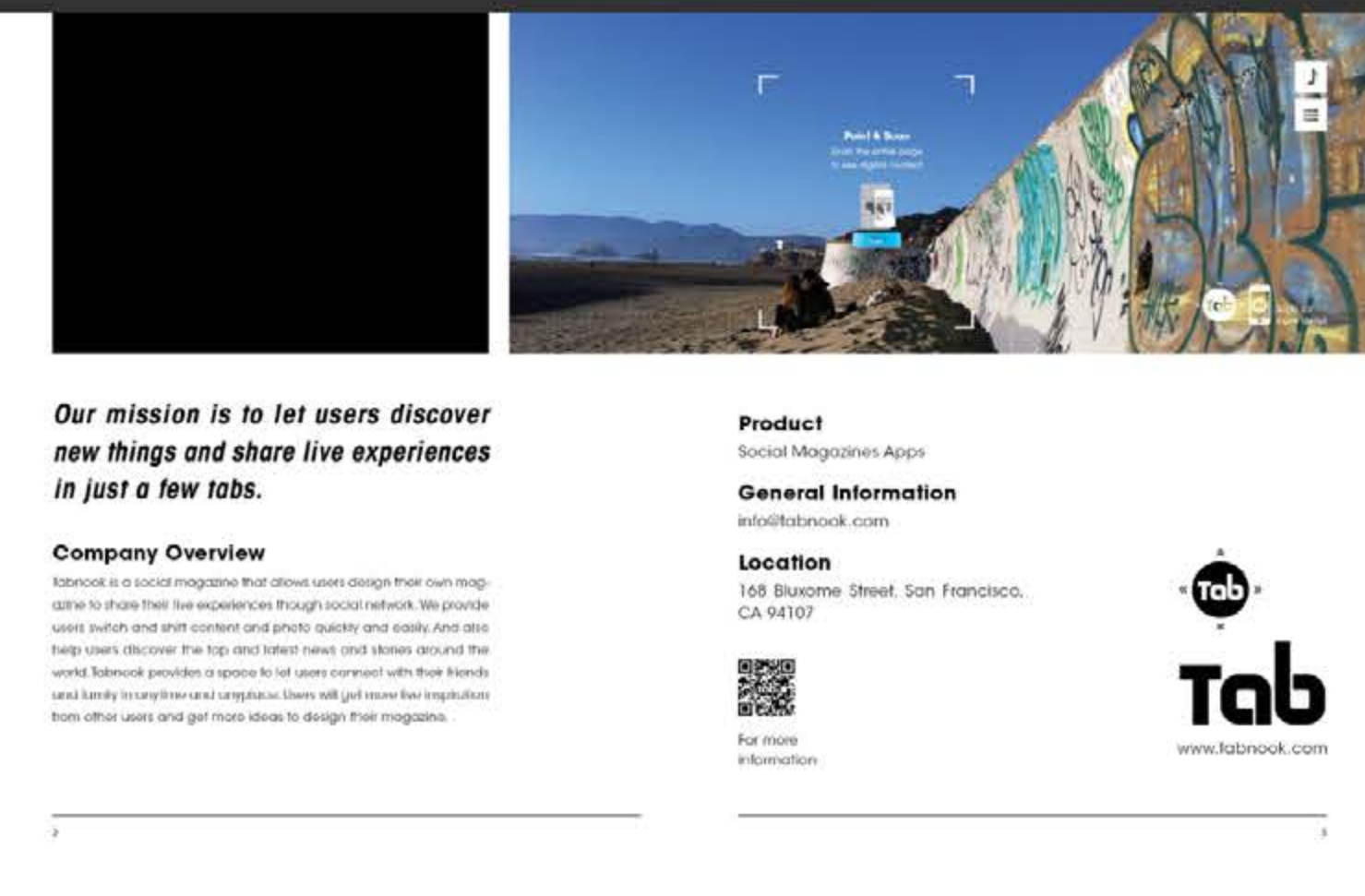
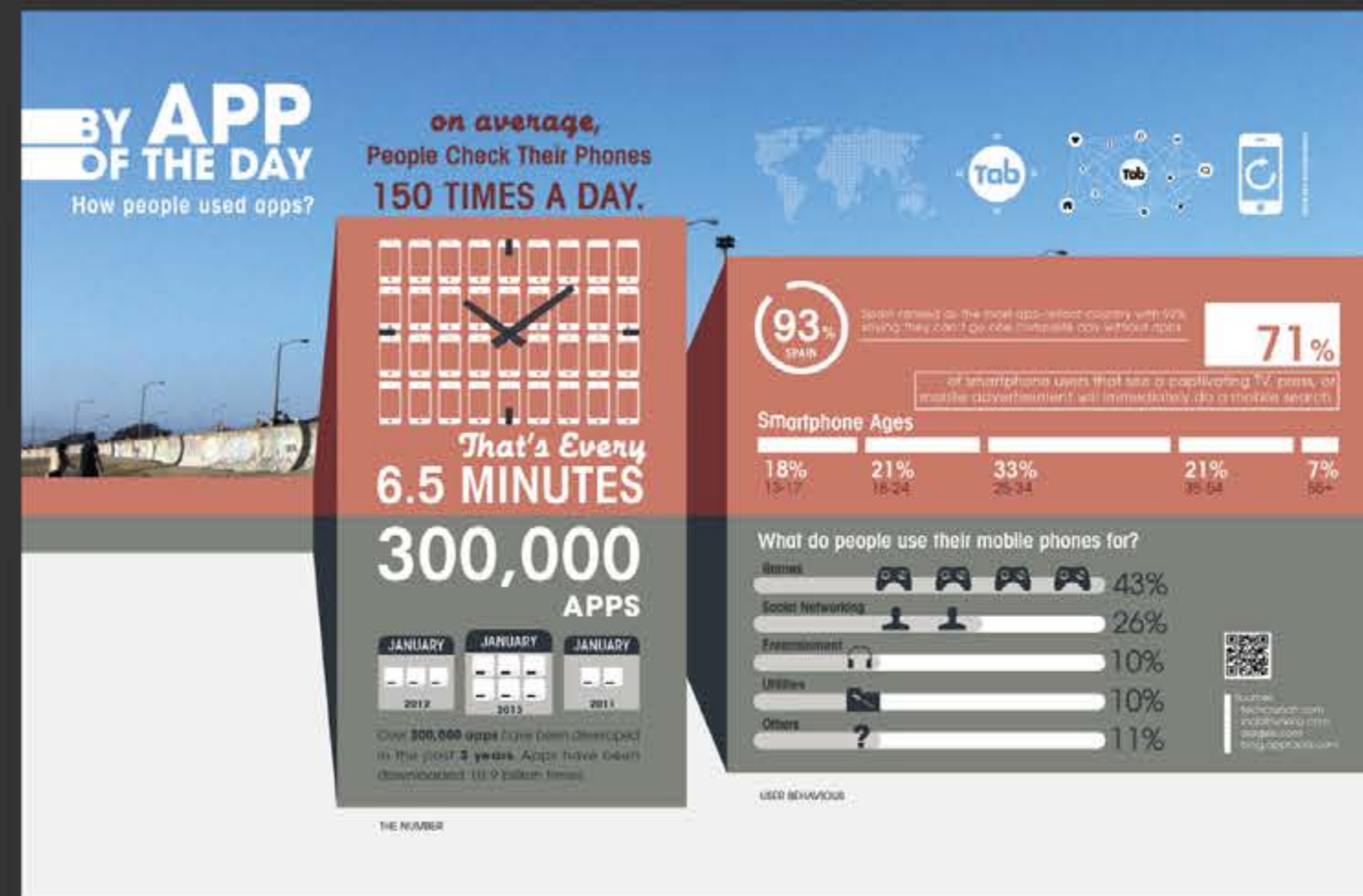


WNM 605

Typography for Digital Masters

Project:
Software:
Instructor:





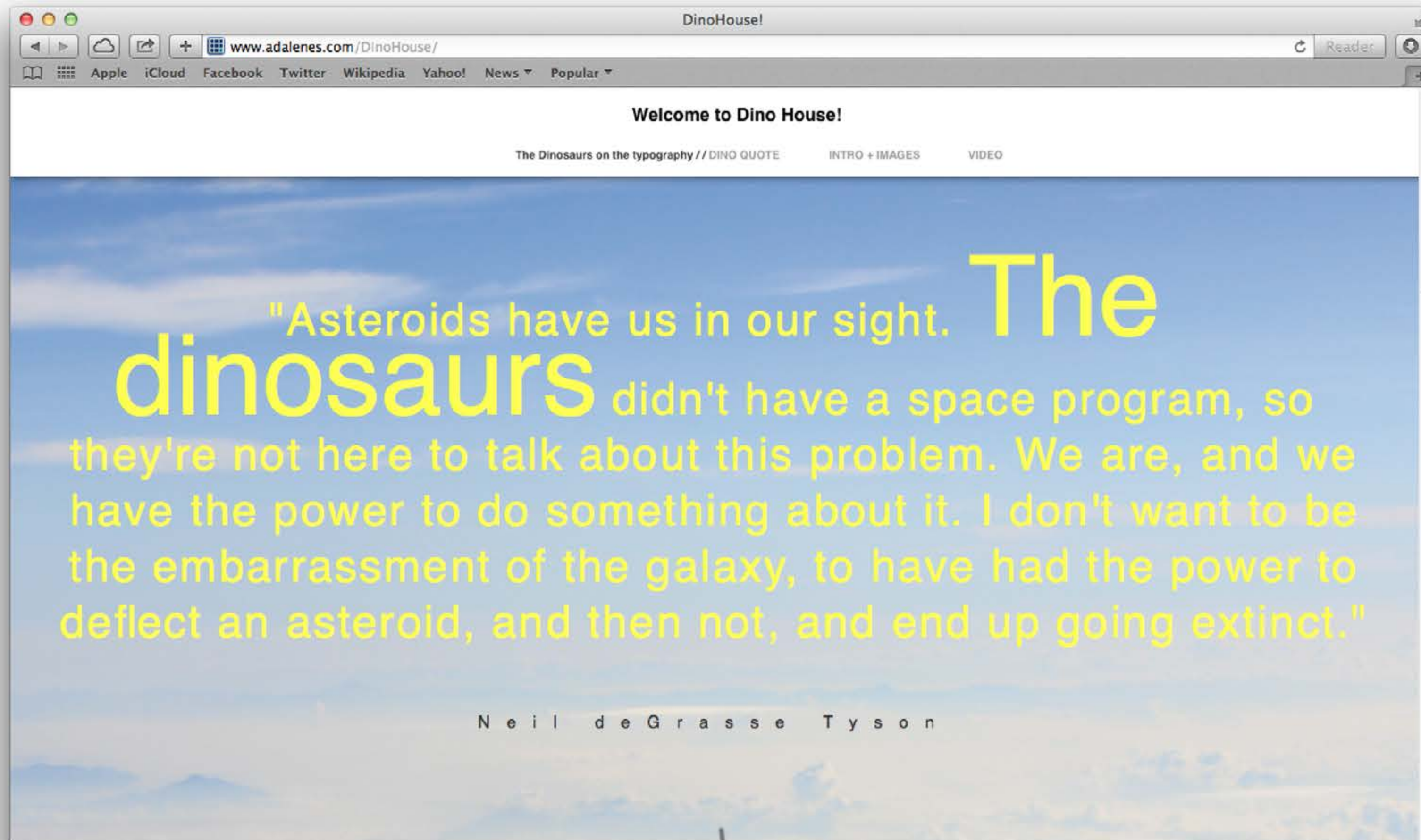
WNM 605

Typography for Digital Masters

Project:

Software:

Instructor:



WNM 601
Inside
Programming
Project:
Software:
Instructor:

WNM 601 Inside Programming

Project:
Software:
Instructor:



EVERYONE FAVORITE RESTAURANT

HARVEY MILK



500 CASTRO STREET,
SAN FRANCISCO, 94114 |
M-F 11AM - 11PM | WKND 9AM - 2AM

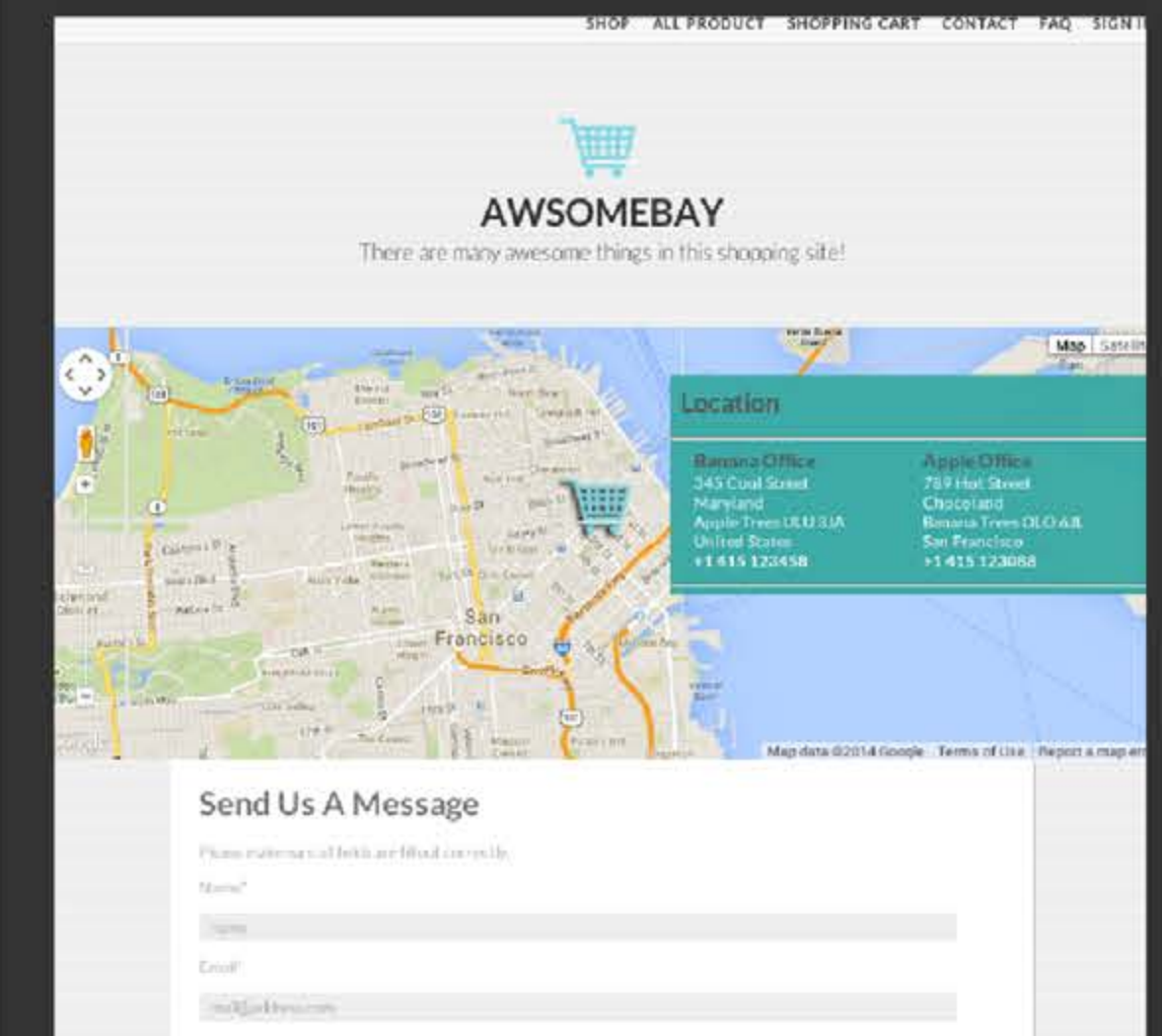
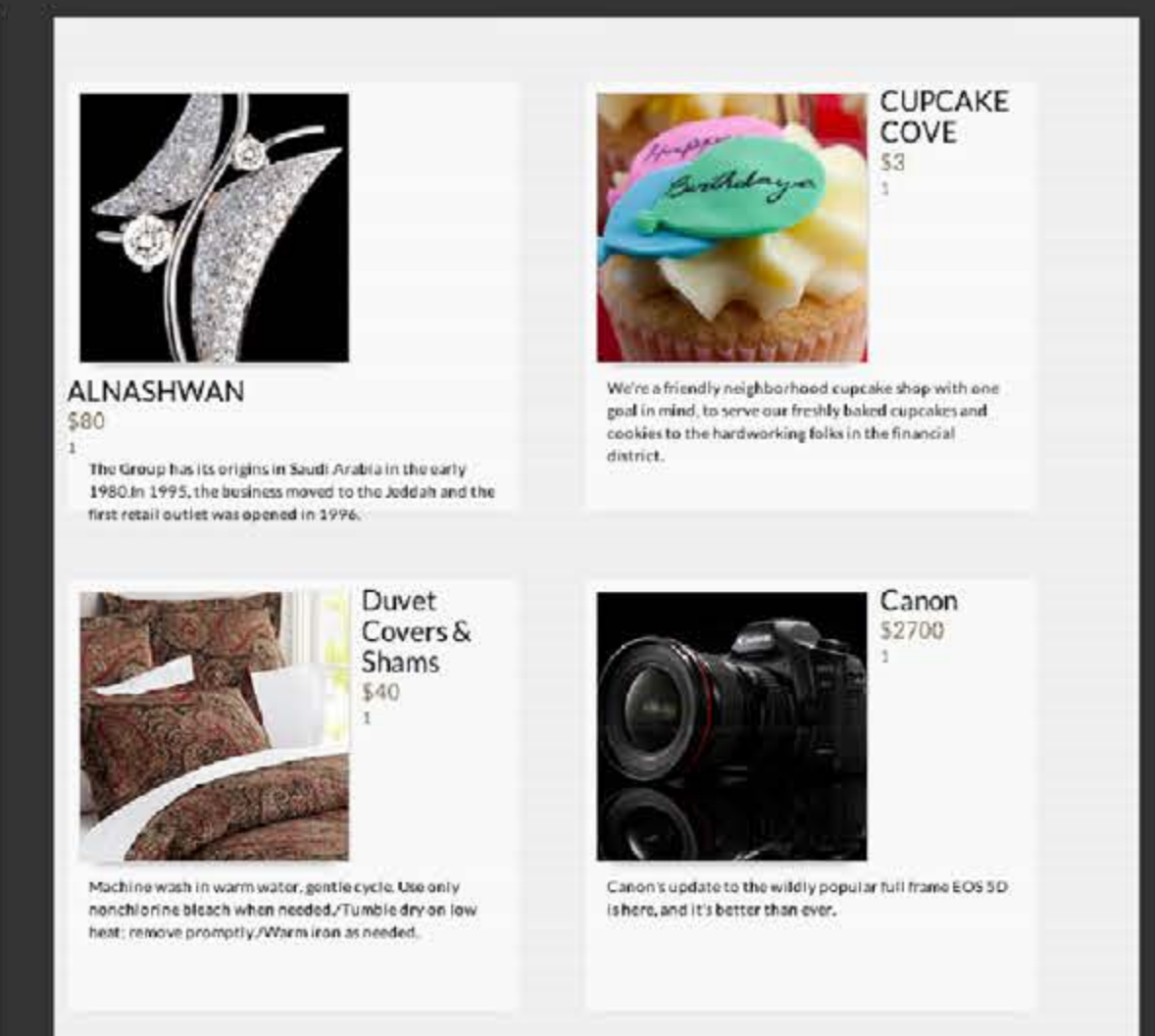
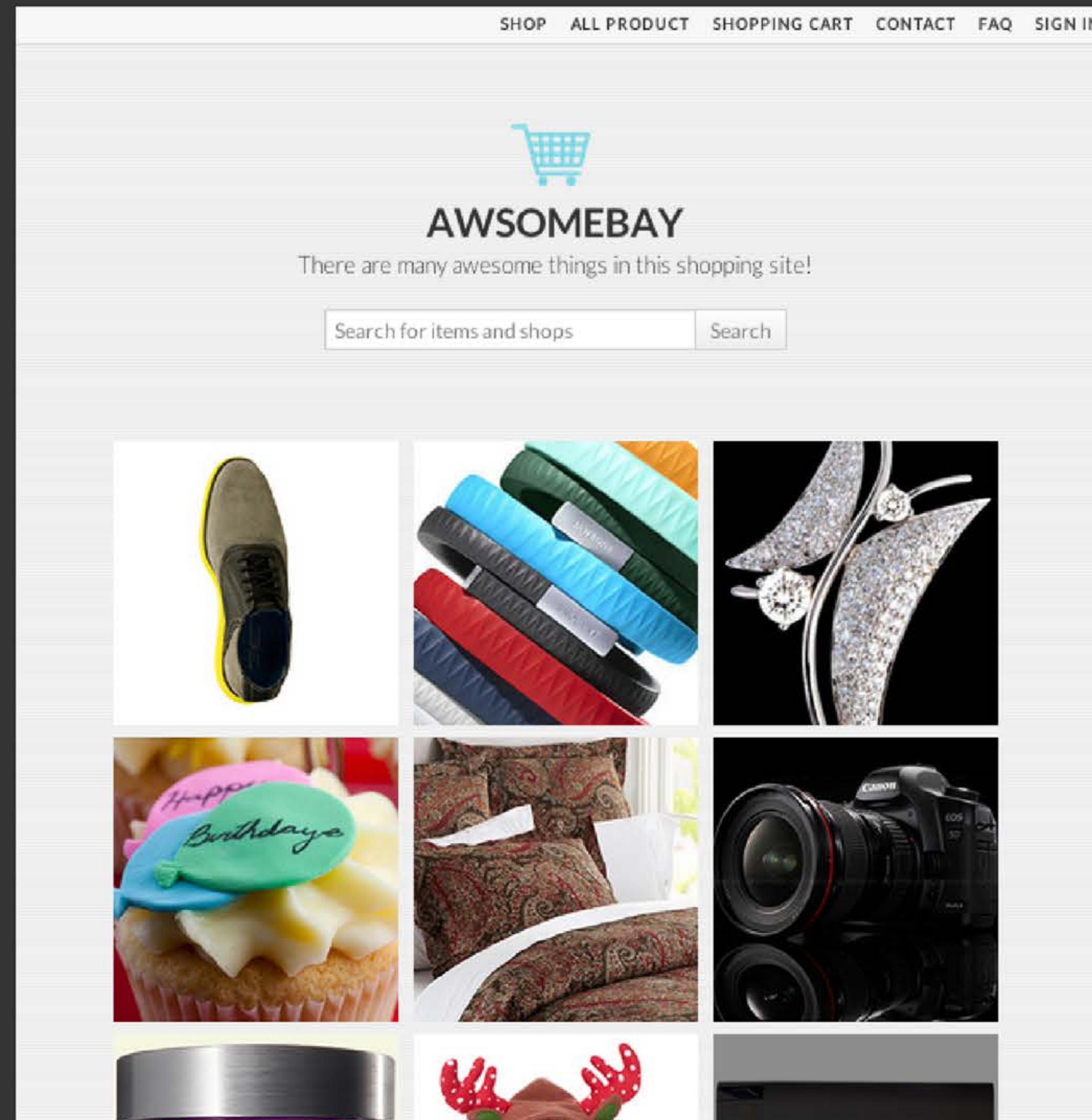
[Home](#) | [Menu](#) | [Event](#) | [History](#) | [About](#)

Welcome to Harvey Milk!

**HARVEY'S
FUNNY**

WNM 605 Web Tech 1

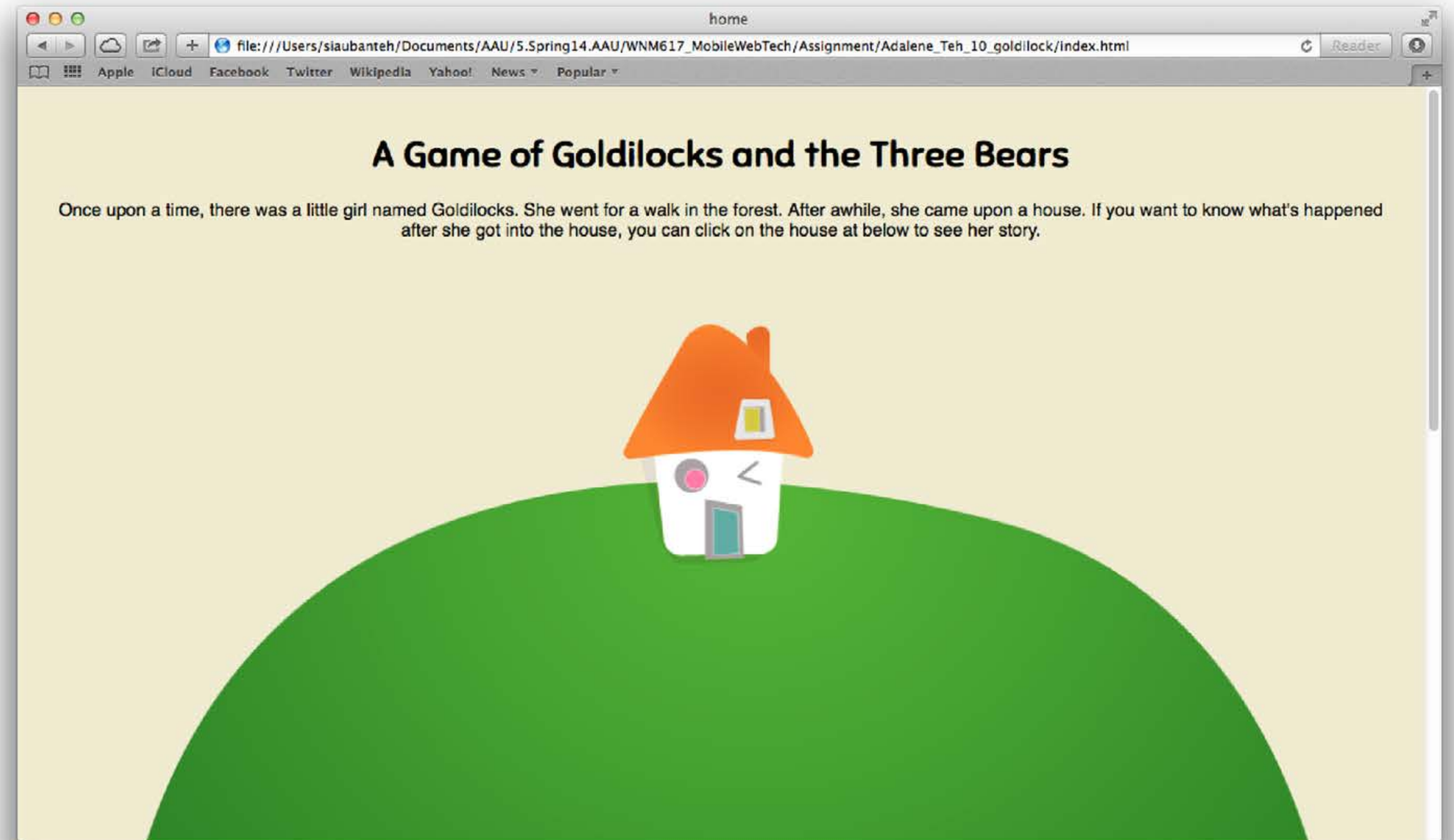
Project:
Software:
Instructor:



WNM 617

Mobile Web Tech

Project:
Software:
Instructor:



Thesis Abstract



This is about Adalene's background and education.

Have you ever forgotten your house keys, or forget to turn off the lights after you leave, or even forget to switch off the heater? These small things are easy to forget in our daily life, but can be very frustrating if we make those mistakes frequently or even only once.

homepilot is an app on your smartphone to control the environment of your house and help you conserve electricity. It provides a service that links all of your electrical devices in one platform. Home pilot also helps you analyze how much of your devices cost on electricity so you can check the data to avoid vampire draw (leaking electricity) and waste the energy. home pilot also allows you to set alarms, reminding you to turn on or off a setting.

For example, as an office worker it would be useful for me to use home pilot's setting and alarm before I go sleep. From the setting I will turn on the lights at 7 am every weekday in my bedroom and bathroom to help me wake up; 7:30 am the kitchen's lights will automatically turn on because it's the time I will go grab my breakfast; at last, I don't want to turn off all the electrical devices one by one in my house, because I'm rushing, so home pilot will have a function to help me do it after I leave my home. Home pilot helps us to save energy and have peace of mind.

The segmentation of home pilot

Home pilot is more focusing on auto control that you can make all the devices automatic on / off by using predictive analysis to set timing. Therefore, you can enjoy your cozy home environment, like you were having someone to service you.

Statement of Interest



homepilot

Your home in the palm of your hand

This is will tell you what's the
begining of home pilot.

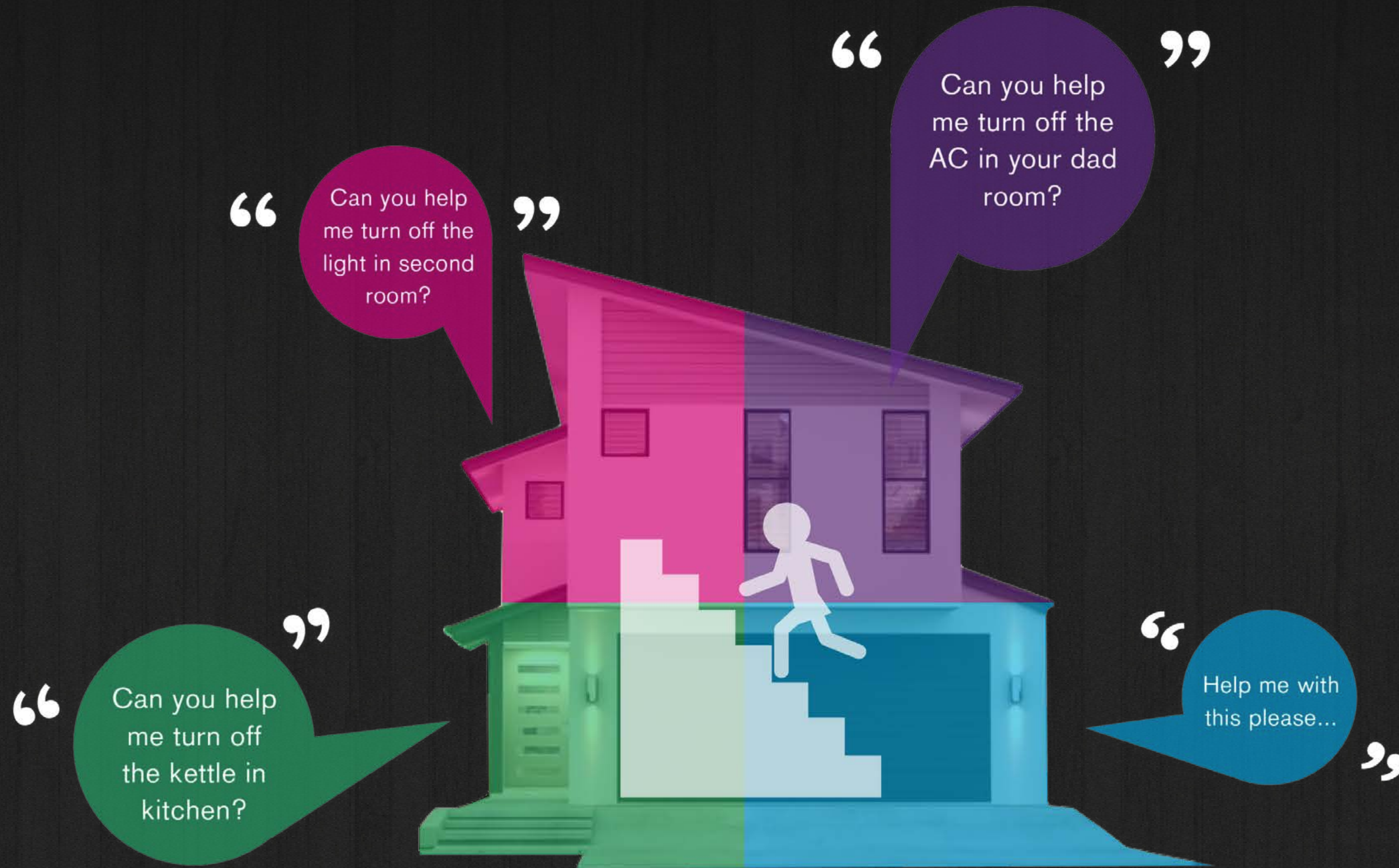
Why do people need home pilot?



I lived in a double story house when I was a kid.

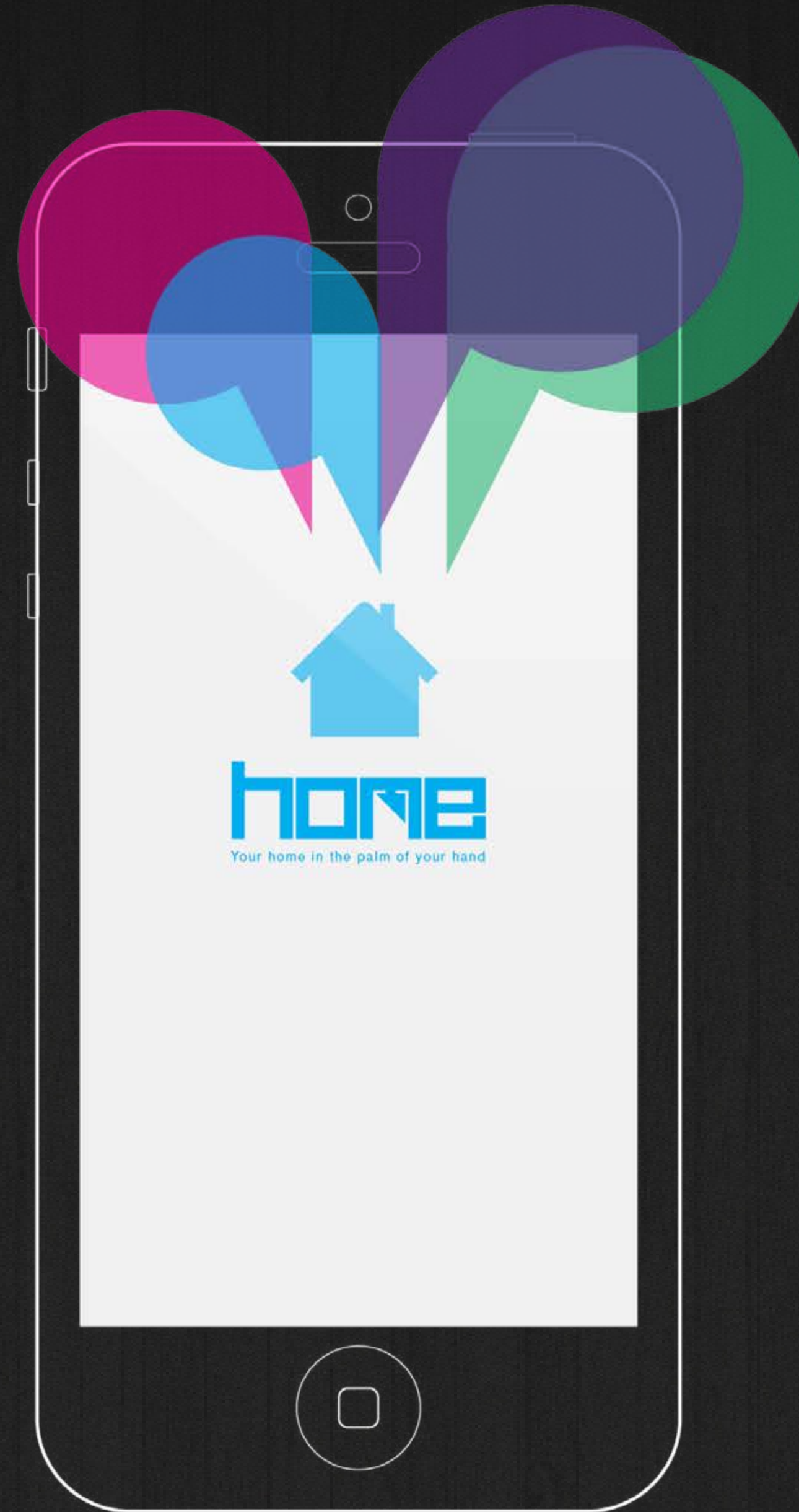


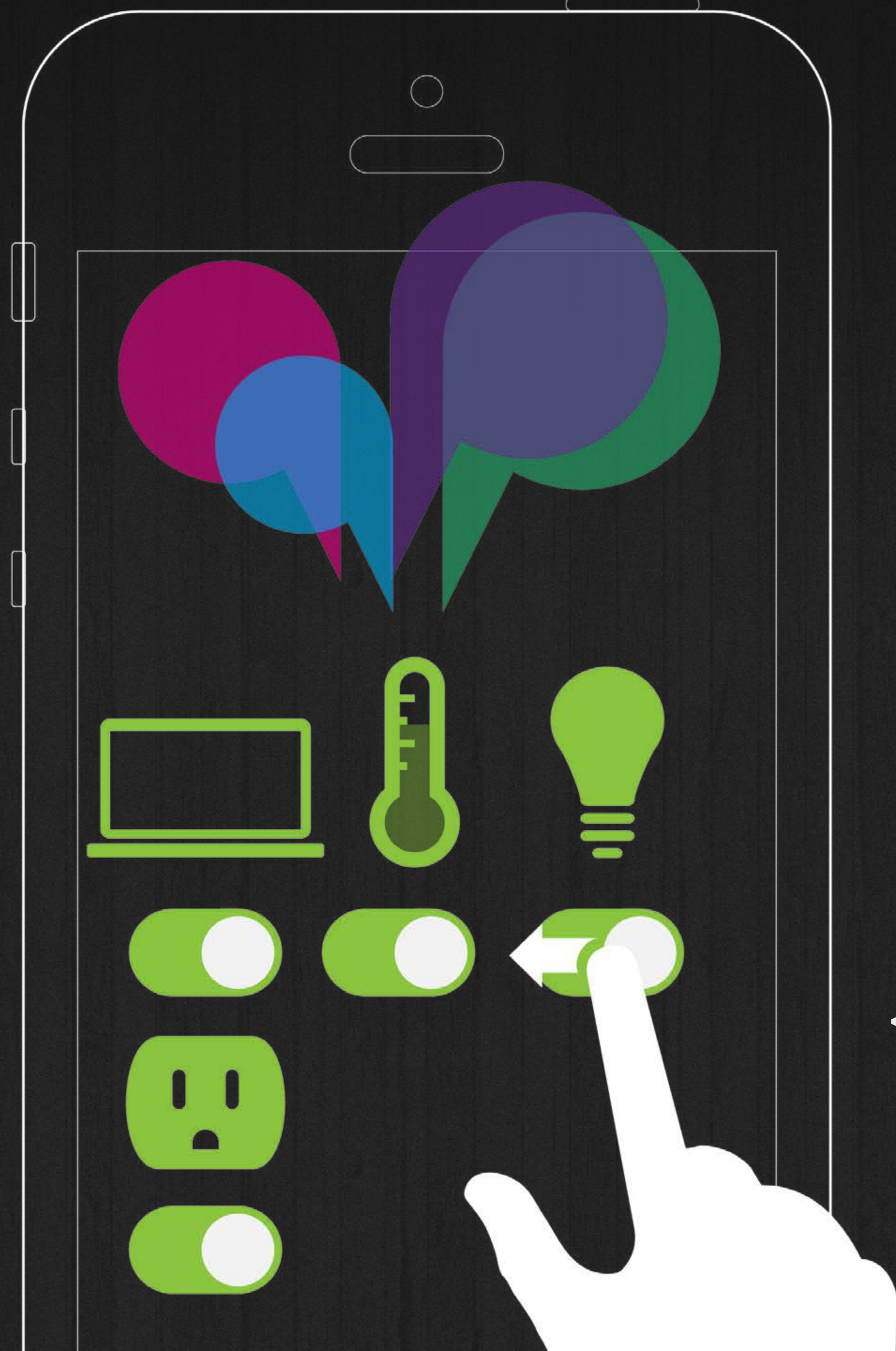
My mother always



so I always had to run between first and second floor.
But I didn't want to pause my game or TV as I was in the
moment – **very annoying** :(

Therefore, **I wish I would have had a remote control** so I could control such trivial devices while I was focusing on my favorite TV show or even better...she could control them herself! It would have made my life easier and happier.





<< like this



SAVE TIME



SAVE MONEY

Therefore, I know my mother she want something that can help her save timw and save money.

Influences



This is about Adalene's background and education.

Why do I choose this project?

MY INFLUNCES

//my life

//my experiences

//people around me

Smart City

I like the idea of credit card, I like to put money in my cards, I like e-coupons, I like paperless idea and so on.

Earth Lover Save Energy Recycle

Maybe you don't know that I am used to use recycle paper to take notes, and I've been never waste a piece of paper without it have been used on both sides.

Hp smart printer

I was helping my mother print out her stuff through Hp smart printer, when I was not at home.

Thesis Project Proposal



This is about Adalene's background and education.

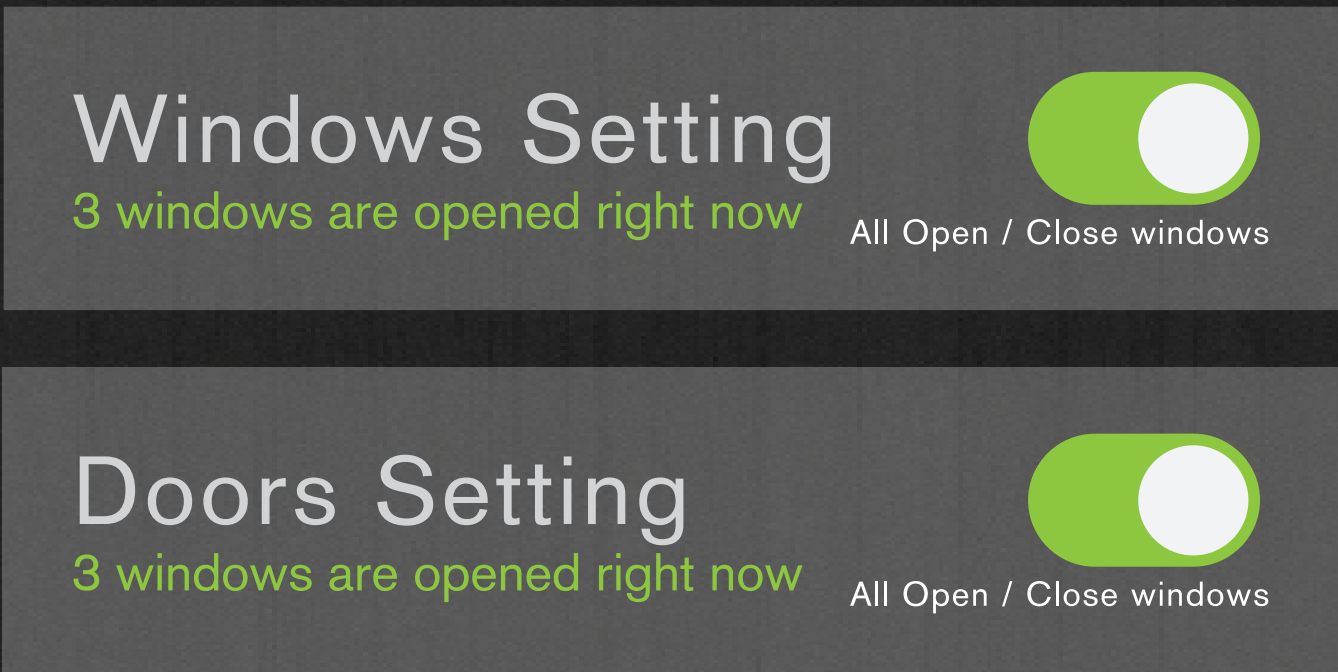
What is home pilot?

Home is an app on your smartphone to control the environment of your house and help you conserve electricity.

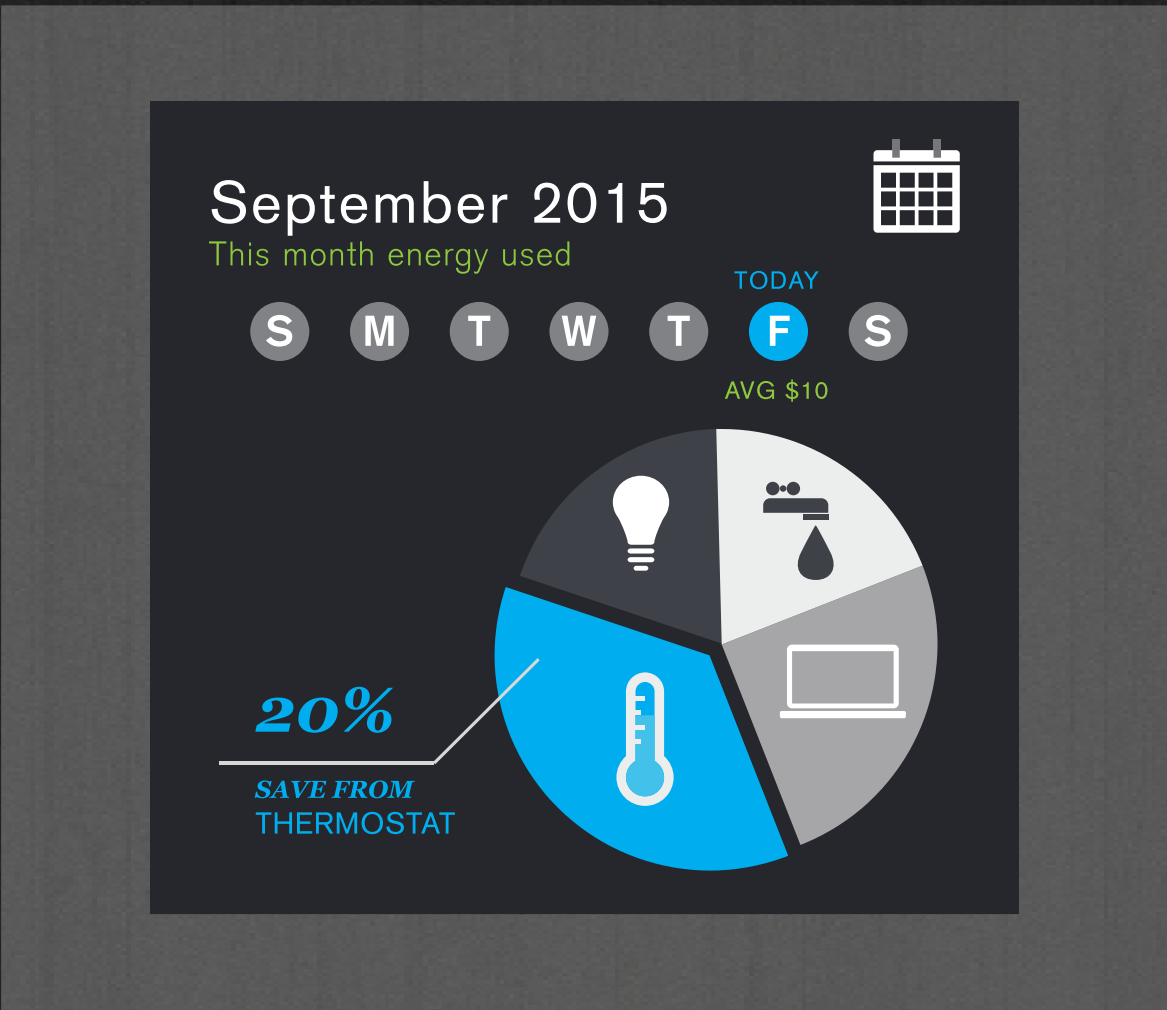
Monitor your home environment



Track your home environment



Review your home energy



Market Research



This is about Adalene's background and education.

MARKET RESEARCH

People are spending more time on their smartphones than ever before, so it's time to use your phone to control everything at home.

U.S. Households

65%



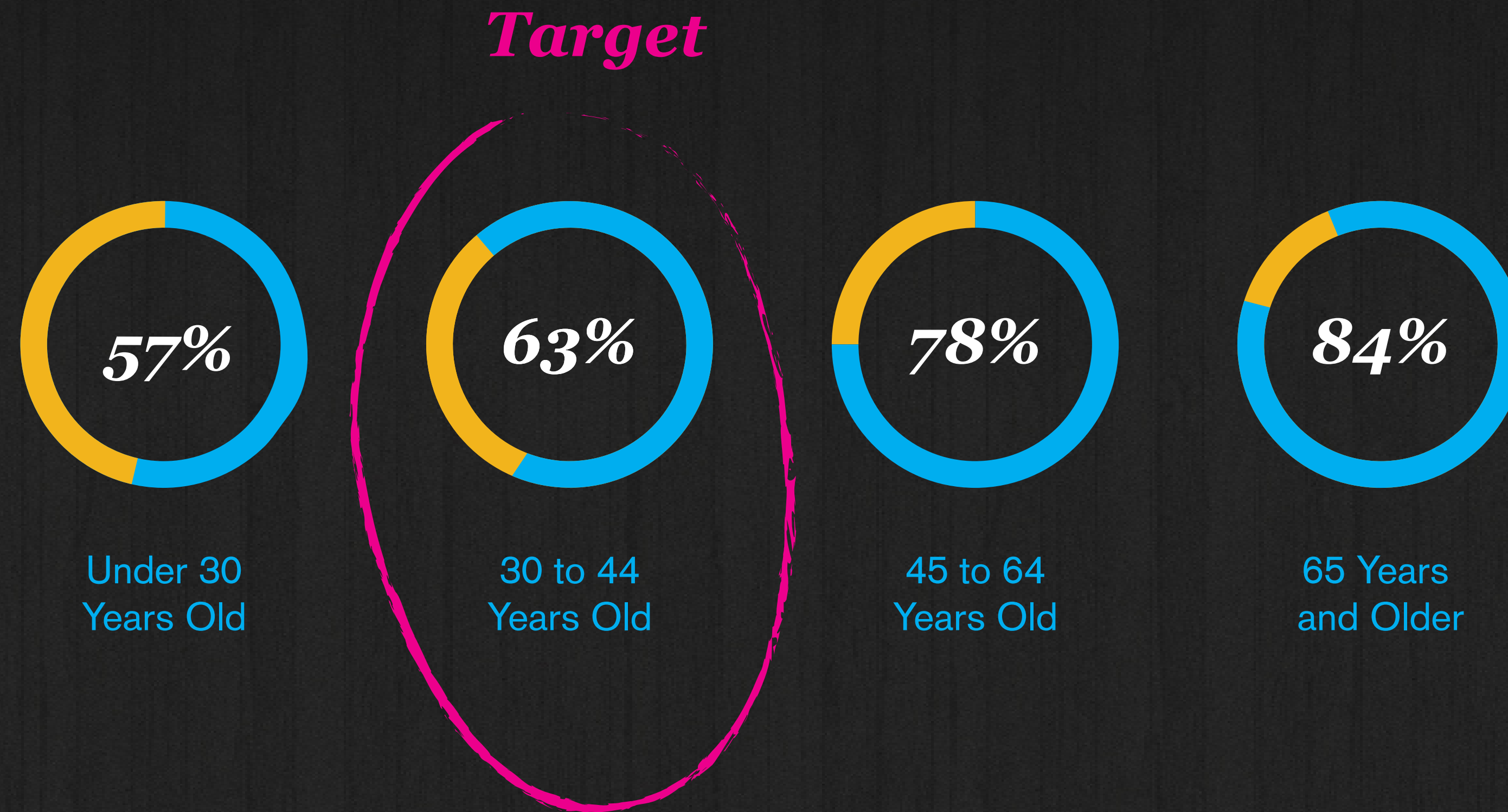
Owner-Occupied

35%



Renter-Occupied

Target Audience

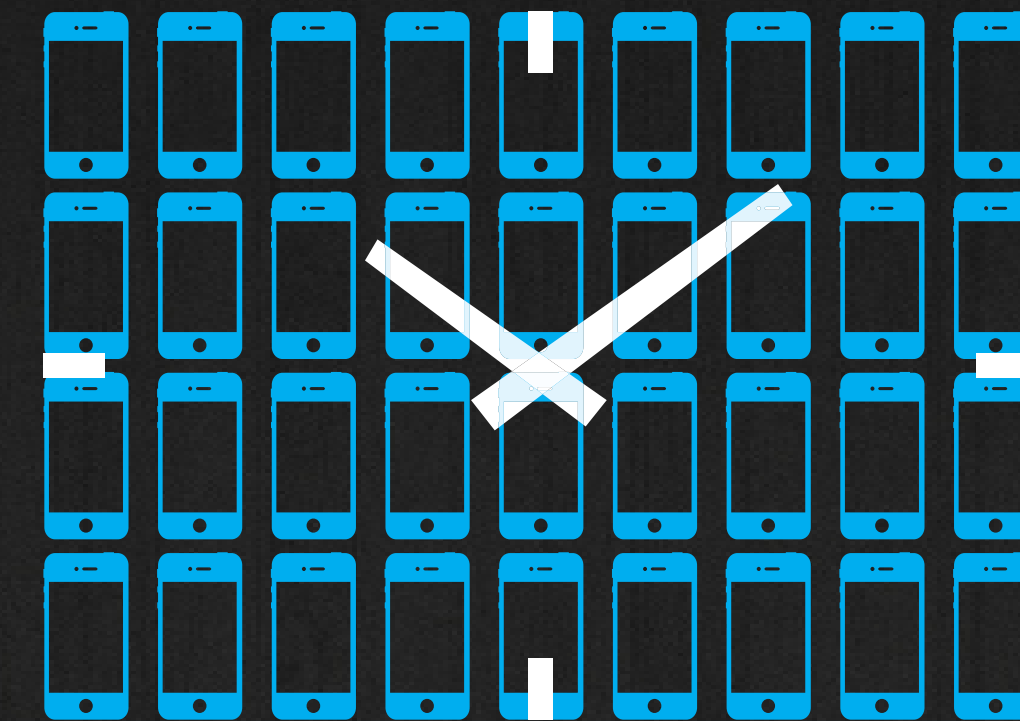


People in Owner-Occupied Housing

American Lifestyle

How do people use apps?

on average
People check their phones
150 TIMES A DAY
That's Every
6.5 MINUTES



86%

of mobile internet
users are using
their devices while
watching tv

75%

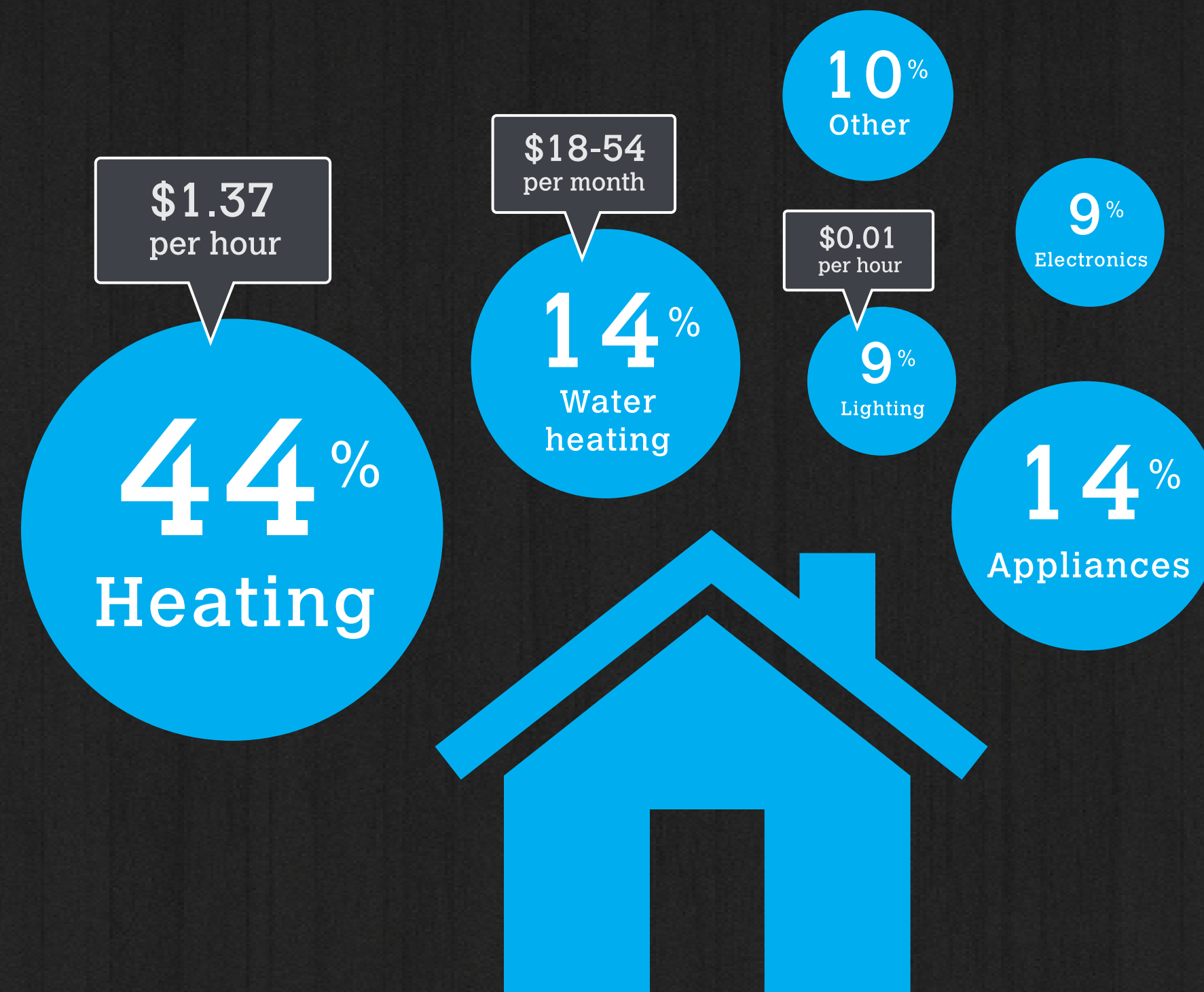
of Americans
bring their
phones to the
bathroom

68%

of american place
their mobile phone
next to their bed
while sleeping at
night

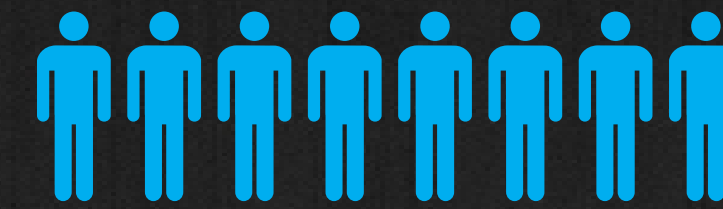
Problem

High energy usage



34%

of 25-71 ages' Americans are spending on housing in a year



Median household income, by age of householder, 2012

25-34	\$51,381
35-44	\$63,629
45-54	\$66,411
55-64	\$58,626
65-74	\$42,343



\$\$\$\$\$\$\$\$\$\$
\$\$\$\$\$\$\$\$\$\$

to save money

Solution

Monitoring energy usage

Smarthome Future

Monitoring energy usage

on average,
people with home automation
receive home insurance savings of

20%

or

\$1,154
a year

The average household
energy bill is

\$110

each month

But with home
automation you'd save

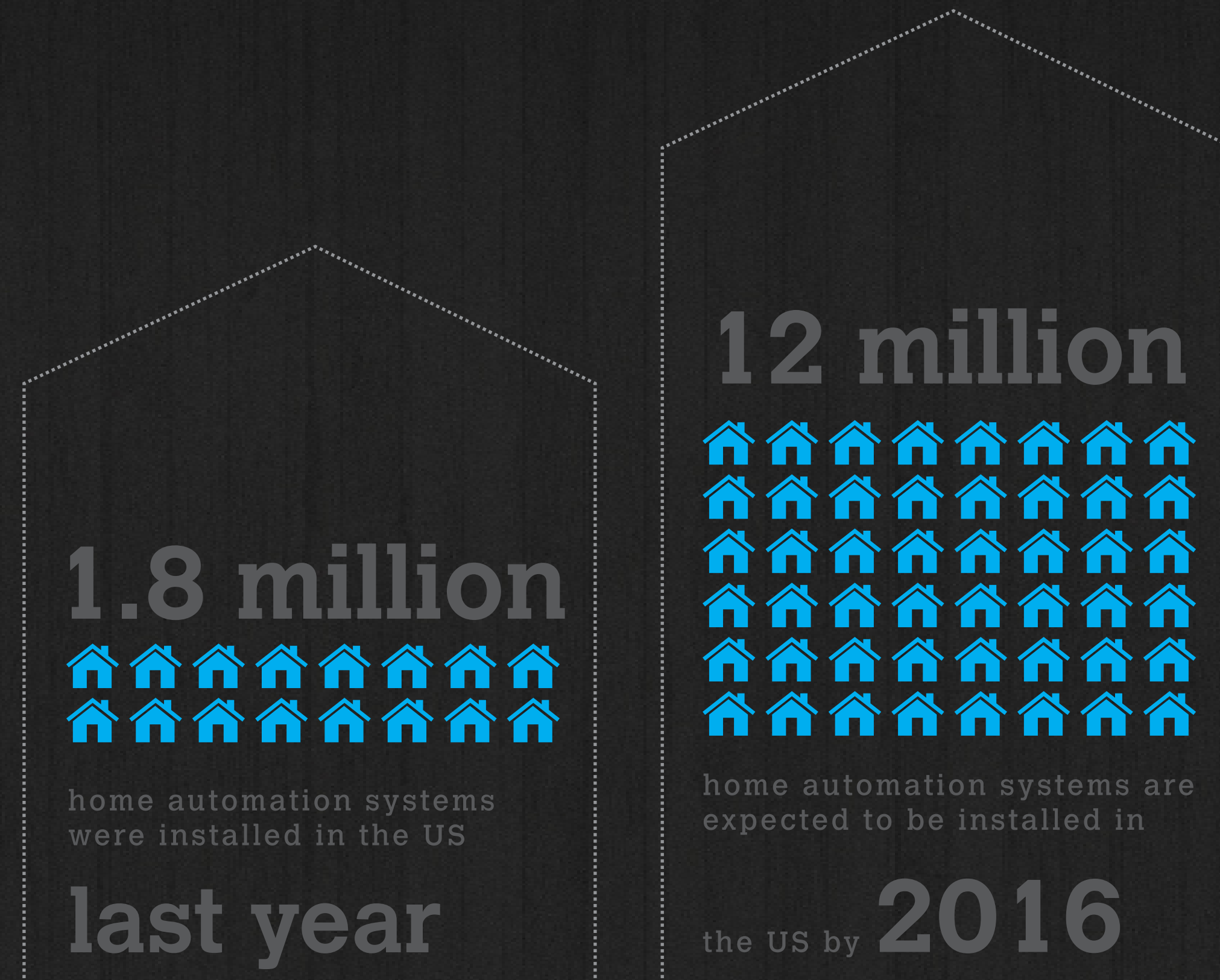
\$16.50

each month

or

\$198
per year

Smarthome Future



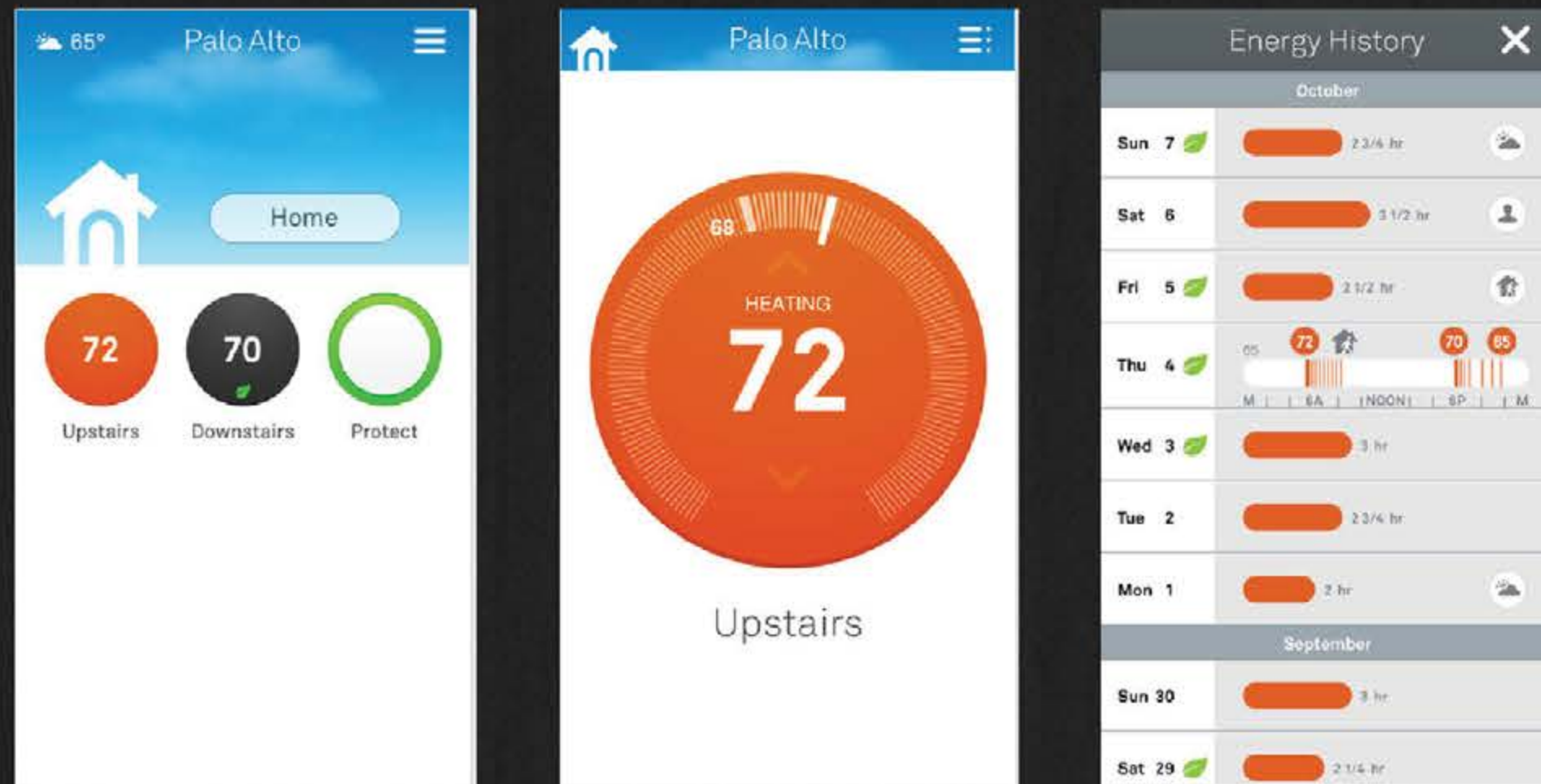
Competitors



This is about Adalene's background and education.

COMPETITOR NEST APP

NEST is an app for iPhone, iPad or iPod touch where you monitor Nest Thermostat, Nest Protect smoke and other Nest products. The app helps you adjust the temperature on your Nest Thermostat and get notifications for important events, such as emergency alarm.



PROS

- Beautiful and simple interface design.
- Easy to understand the user interface contents.
- Smart features: Filter Reminders, Weather, Humidity, Temperature sensors and etc.

CONS

- From customer reviews, they mention it has a lot of bugs on the app.
- Their customer feedback nest's products can't get a stable connection with the app.

COMPETITOR SAMSUNG

Samsung Smart Home Control is an app for smartphone, tablet or pc where you control Samsung TV, Samsung Washing Machines, Samsung Air Conditioners and Samsung PC. The app helps you to do basic remote control on your Samsung smart products at anywhere.



PROS

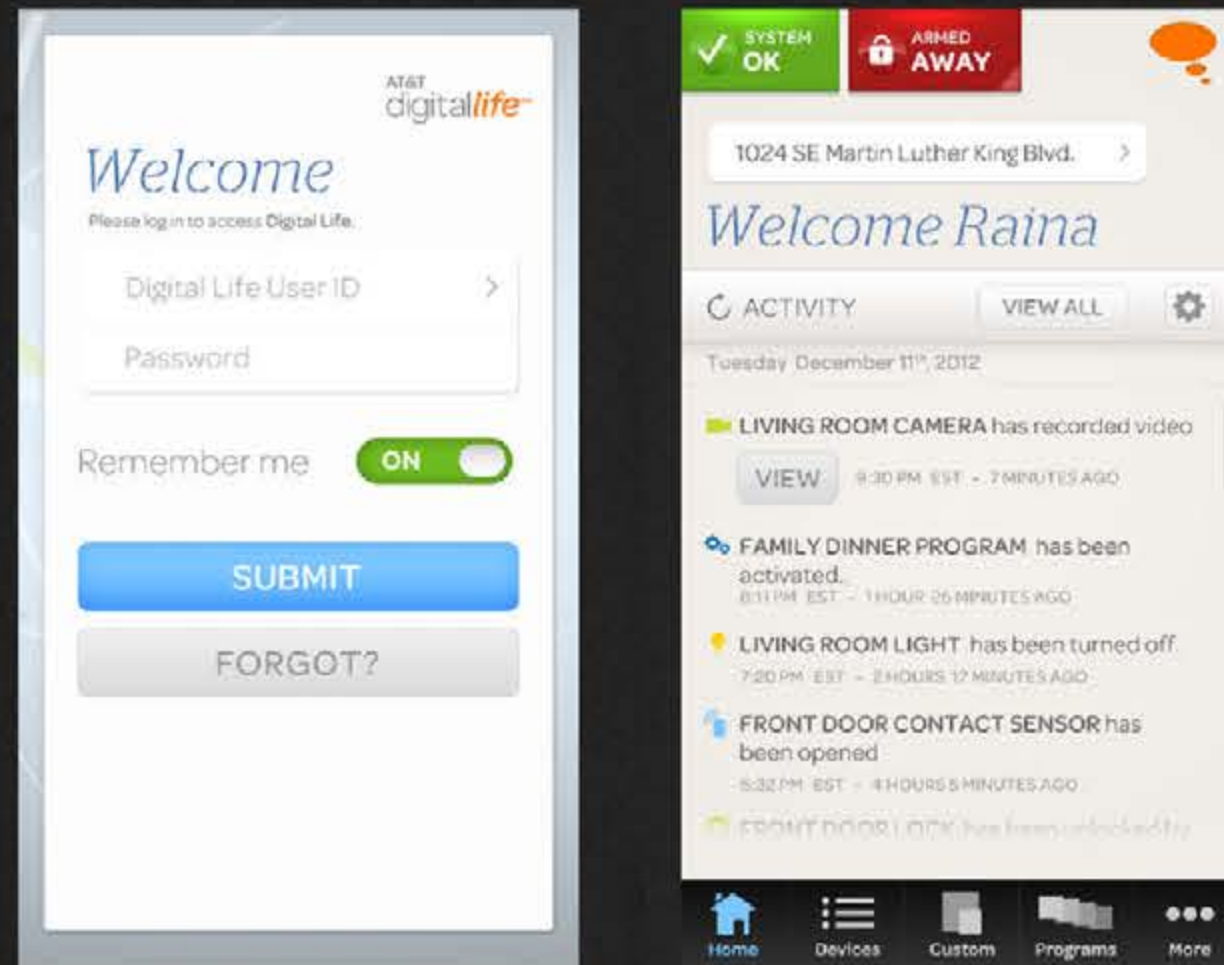
- Your mobile device can work as a remote control.
- The design of the UI looks like original remote control, which mean users easy to understand the interface.

CONS

- The interface design looks boring and not fun at all.
- All Devices must be connected to the same wireless router.

COMPETITOR AT&T

AT&T Digital Life is an app for smartphones and tablets where you can manage your home security and remote monitoring water, energy, door, and camera at home.



PROS

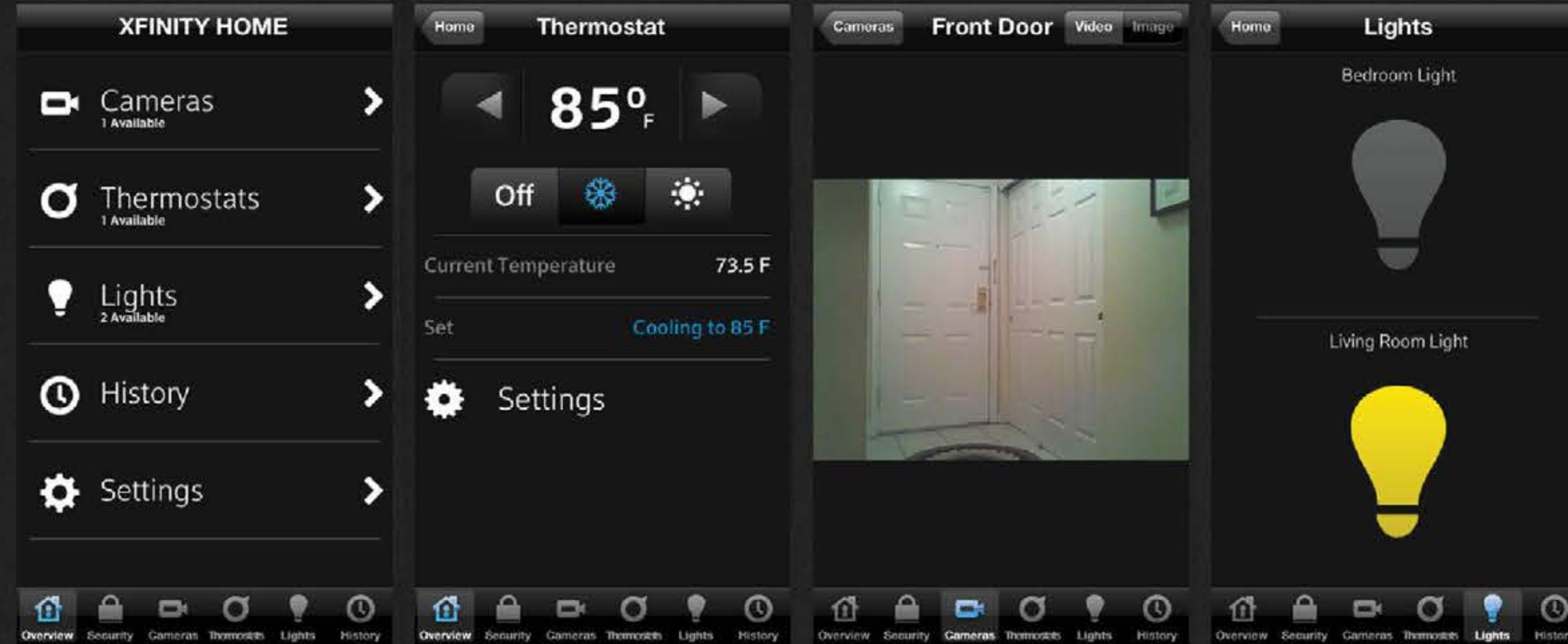
- Big bold icons and font size that it will help older people easy to read the interface's contents.
- Smart features: Water detection, Water control, door sensors and etc.

CONS

- The company said the service only would be available in up to 50 markets in United States by the end of 2013 which mean you can't use the product if you are not live in U.S.
- Their equipment is very expensive.

COMPETITOR XFINITY

XFINITY Home is a mobile app where you can monitor your house's security and smart device when you are not at home.



PROS

- Black and white user interface design.
- The layout of the interface is very clear and easy to understand.

CONS

- The design of user interface could have more fun.

COMPETITOR ZULI

Zuli Smartplugs is a mobile app where you can control Zuli Smartplugs and adjust dimmers, set timers and save energy.



PROS

- Beautiful and simple interface design.
- Beautiful typography and color interface design.

CONS

- You can't monitor your digital devices from the app.
- White outline icons design maybe hard to see at night.

Competitive Analysis



This is about Adalene's background and education.

Competitive Matrix						
APP \ FEATURES	NEST	SAMSUNG	AT&T	XFINITY	ZULI	HOME
Thermostat	●	●		●		●
Protect Smoke	●					
Water Control			●			●
Digital Devices		●				●
Security System: Door		●	●	●		●
Camera		●	●	●		●
Lighting	●	●	●	●	●	●
Emergency Alarm	●		●			●
Timer	●	●	●	●	●	●
Reminder	●			●		●
Email				●		
Weather Sensors	●					●
Energy Management (Months/Daily usage)	●					●

Target Audience



This is about Adalene's background and education.

Primary Users

Secondary Users

User Personas



This is about Adalene's background and education.

TARGET PERSONAS



Joan Calduch

Age: 35
Sex: male
Marital Status: Single
Home Ownership: New House Owner



Ryan Evans

Age: 38
Sex: male
Marital Status: Married
Home Ownership: House Owner



Stella

Age: 40
Sex: female
Marital Status: Married
Home Ownership: House Owner



Target User Persona # 1

Joan Calduch

Age 35

Sex male

Marital Status Single

Home Ownership New House Owner

Current Location San Francisco, United States

Original Country Spain (Barcelona)

Education: MFA Animation and VFX

Occupation 3D Technical Lead

Background photography undergrad,
graduate in animation and VFX

Tech savvy 5 stars

DEVICES



Likes: Videogames, Traveling, Cultural Exchange

Hobbies:

Playing Instruments (Piano, Ukulele, Guitar),
Football, Sailing

Personality

95% Openness

Vs.

5% Neuroticism

Are you

85% Optimism

Vs.

25% Cynicism?

What is your desire / expectation that
smart-home could do for you?

Save money

Joan used most of his money for buying house,
so he hope smart-home system can help him
save money. He said he always forget turn off
heater, lights and water after these are not
needed. Those energy waste will cost his bills,
so he need a system to help him to converse
energy.

Control Everything in house

In another way to save energy, he hope the
technology can use nature energy to help him
save more energy. For example, the technology
can use nature sun light and warm to warm his
house so it can converse temperature in his
house for night.





Joan's expectation of home pilot

"I hope home pilot app can help me to save a lot of monney!"



SAVE \$\$\$\$



Task Flow For Joan



control



Today
Weather



Open
Windows



control



Joan's house



Save Energy



Get Happy Bills



Target User Persona # 2

Ryan Evans

Age 38

Sex male

Marital Status Married

Home Ownership House Owner

Current Location London, United Kingdom

Original Country Manchester, United Kingdom

Education: MS Data and Telecommunications

Occupation Founder & Developer at pubble.co

Background Software Engineer

Tech savvy 4 stars

DEVICES



Likes: Videogames, Traveling, Cats, Pasta

Hobbies: Hiking, Climbing, Movies, Music Shows

Personality

85% Openness

Vs.

15% Neuroticism

Are you

65% Optimism

Vs.

35% Cynicism?

What is your desire / expectation that smart-home could do for you?

Convenience

Evans hope that the technology can help him on his live, such as control the heater in his house from the way he is going home, so his house is warm when he got home. Further, Evans desire some of the electronic things can use auto control, so he can set timing for the machine to make it on/off. From those example, he thought it can help him to have a quality lifestyle.

Security system

He thought security is a very important thing at home. He desire the technology can give him notification or do something to help him while stuff was happening.

Save money

Evans though if the technology can help him save money is a bonus.

User A

Home Page

Category

Article

Related Article (target)

User B

Search Term

Search Results

Article (target)



Evans's expectation of home pilot

"I hope home pilot can help me to save a lot of time!"



SAVE



Task Flow For Evans



control



Movies time



control



Open
smart
devices



Turn on the kettle
in kitchen while he
is watching movie



control



Save Time



Get Happy Coffee
and Movie time



Target User Persona # 3

Stella Nina

Age 40

Sex female

Marital Status Married

Home Ownership House Owner

Current Location San Francisco, United States

Original Country San Francisco, United States

Education: Marketing and Financial

Occupation Marketing Leader

Background Business and Marketing

Tech savvy 4 stars

DEVICES



Likes: Cooking, Party, Karaoke, Cultural Exchange

Hobbies:

Shopping, Traveling, Cycling, Reading

Personality

90% Openness

Vs.

10% Neuroticism

Are you

75% Optimism

Vs.

25% Cynicism?

What is your desire / expectation that smart-home could do for you?

Save the environment

Stella thought if the technology can help for saving the environment and make it in our living life, it's a good thing for people. So she will participant. For example, she hope she can use technology to save the nature's sunshine warm her house and dry her clothes.

Save money

If the technology are collect most of the energy from natural, so it can help her save money on electricity.

Save time

She like automatic system because it is convenience, save time and avoid energy wasted. She would like to set timing on all her lights at home, so there would turn off by the setting system.

User A

Home Page

Category

Article

Related Article (target)

User B

Search Term

Search Results

Article (target)



Stella's expectation of home pilot

"I hope home pilot app can help us to save our planet!"



SAVE



Task Flow For Stella



control



she leave her house



control



She turn off all the
lights in her house
by using the app



control



Save Time



Happy Earth

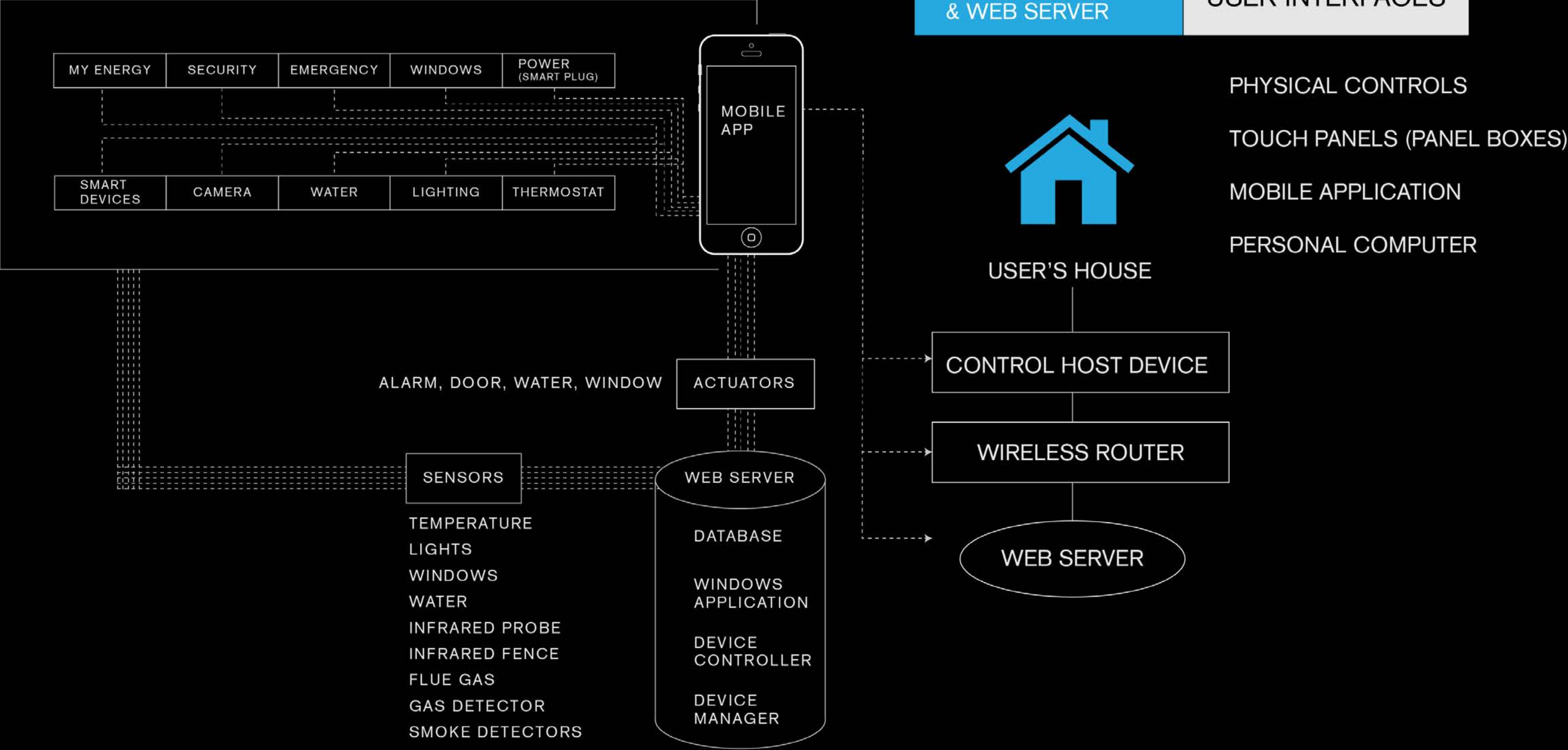
Technical Specifications



This is about Adalene's background and education.

DATA DIAGRAM

In real world



DEVELOPMENT ARCHIECTURE

PROTOTYPE FINAL DELIVERABLE

HTML,CSS,JAVASCRIPT
CHART LIBRARY, D3
JQUERY MOBILE



PHP/JSON

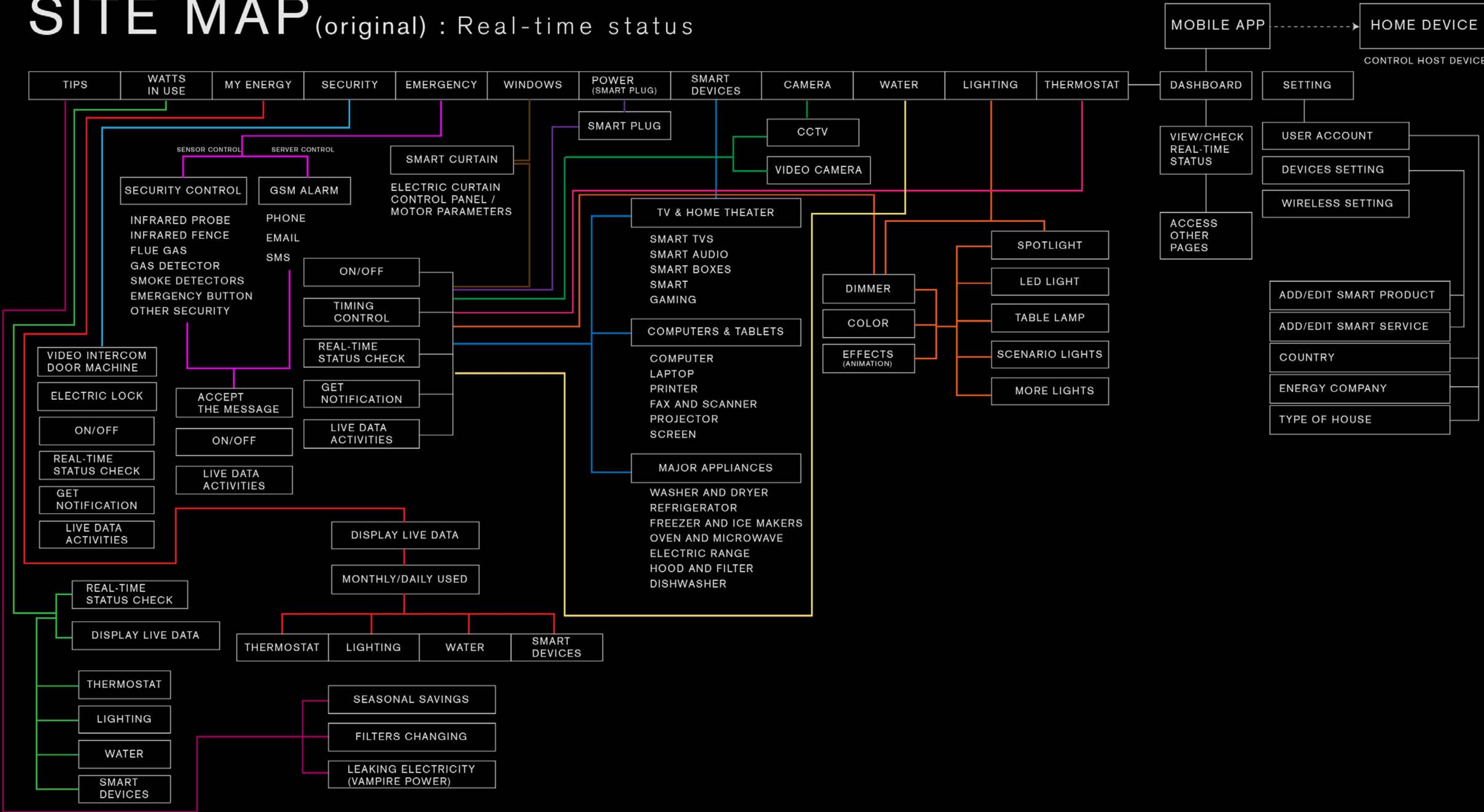


Final Deliverables

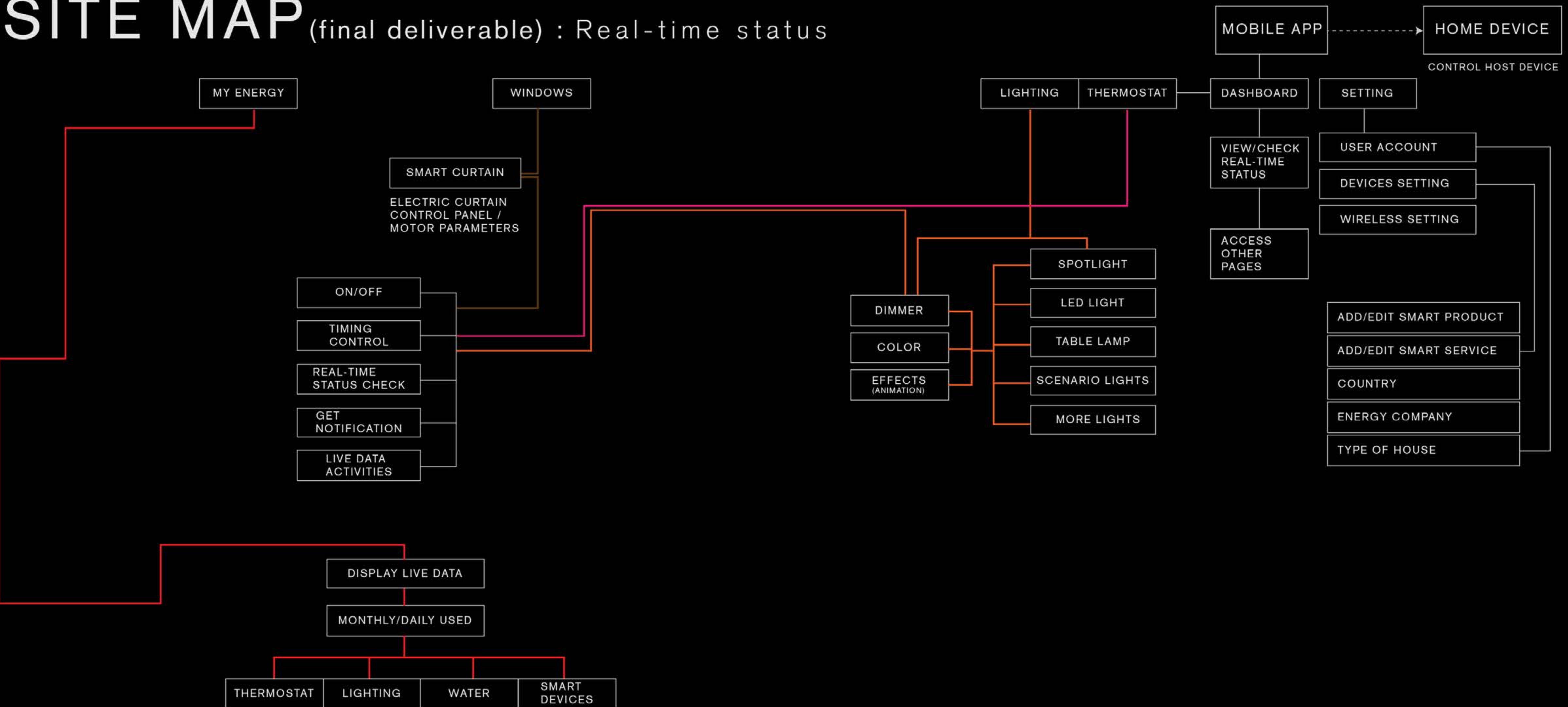


This is about Adalene's background and education.

SITE MAP (original) : Real-time status



SITE MAP (final deliverable) : Real-time status



Wireframes



This is about Adalene's background and education.

STEP 1/20

Download "home pilot" application in apple store.

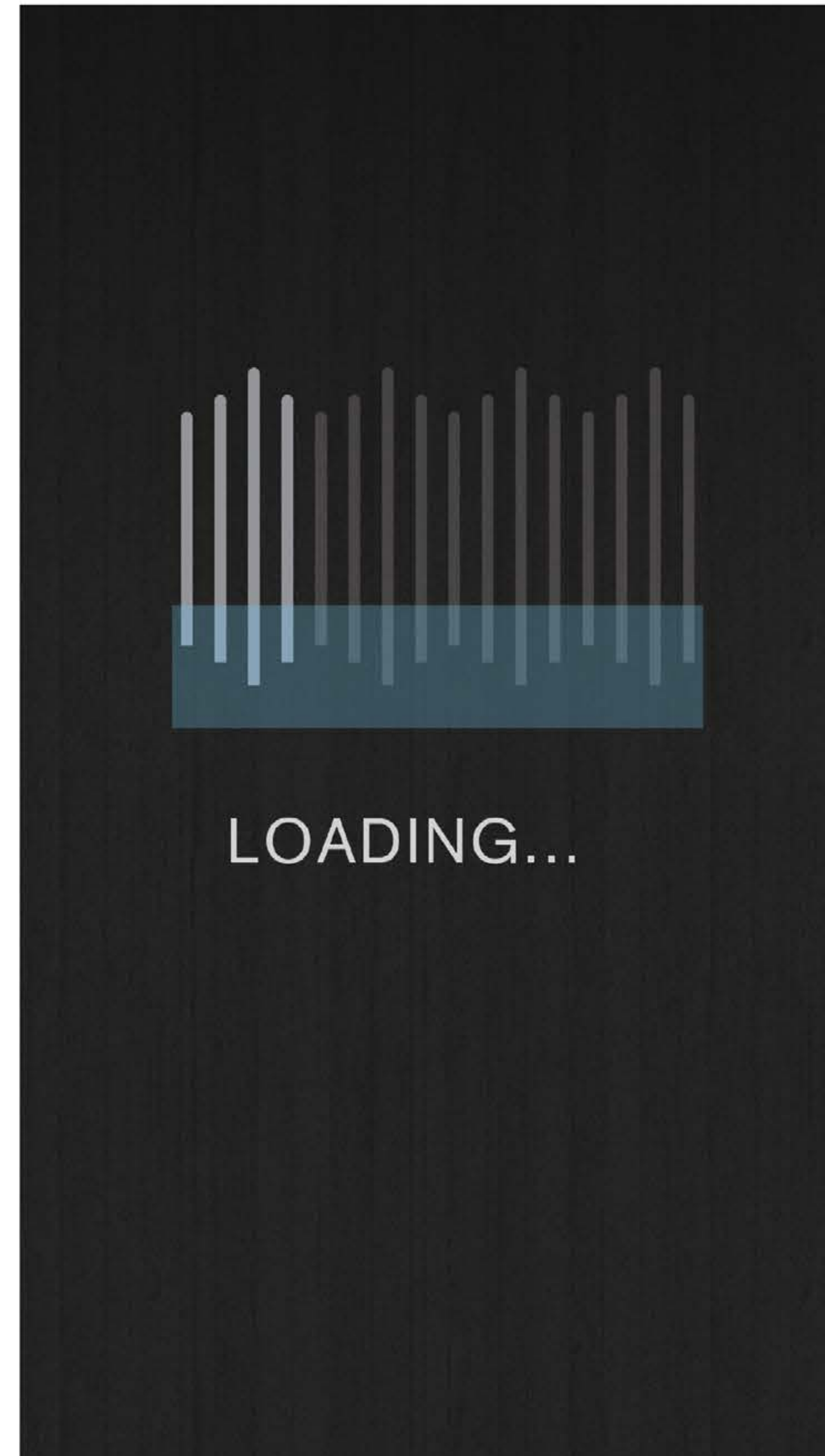
STEP 2/20

And then, open home pilot application.



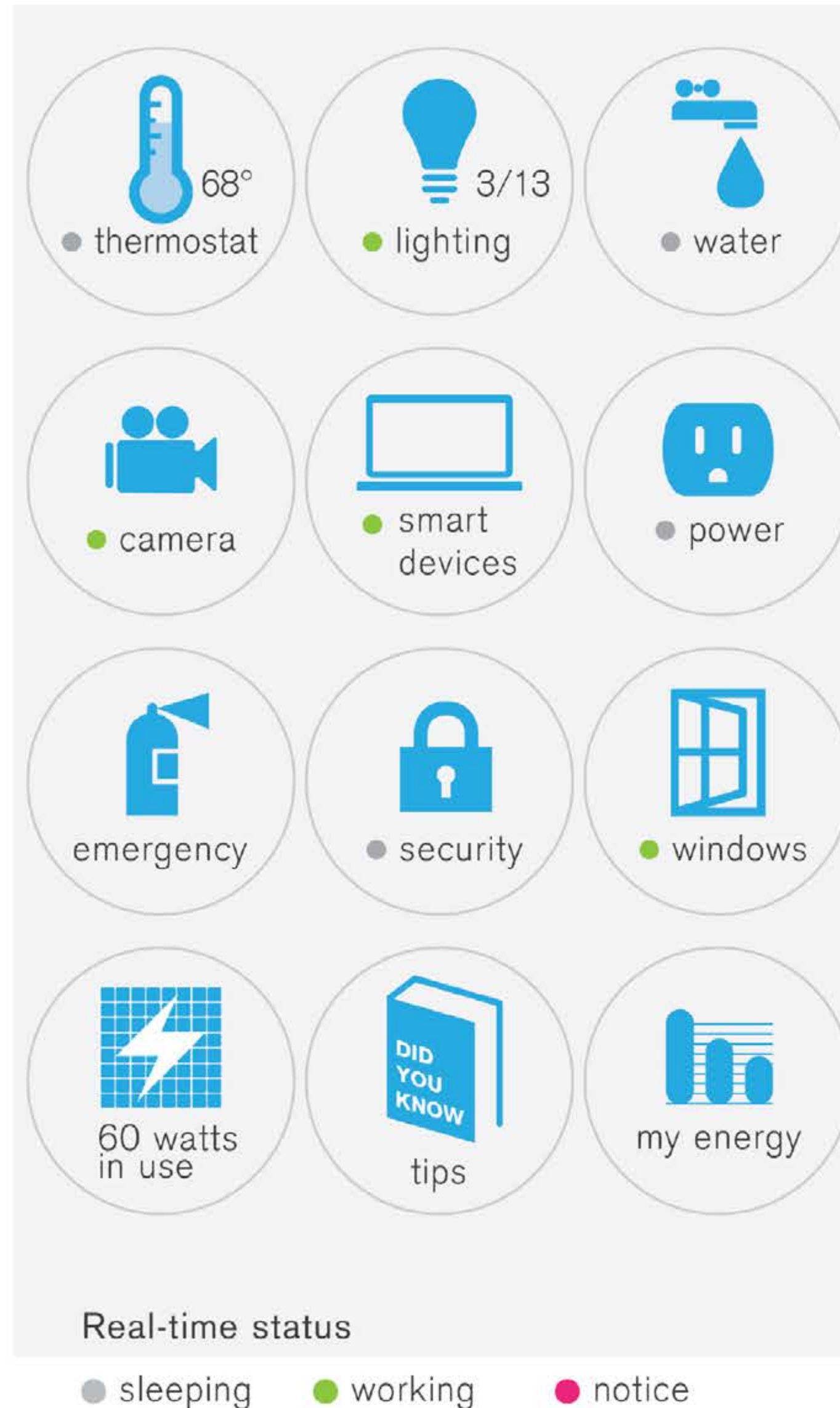
STEP 3/20

You will see this loading page, and you have to wait for it.



STEP 4/20

This is menu page. User can see the real time status via this page.

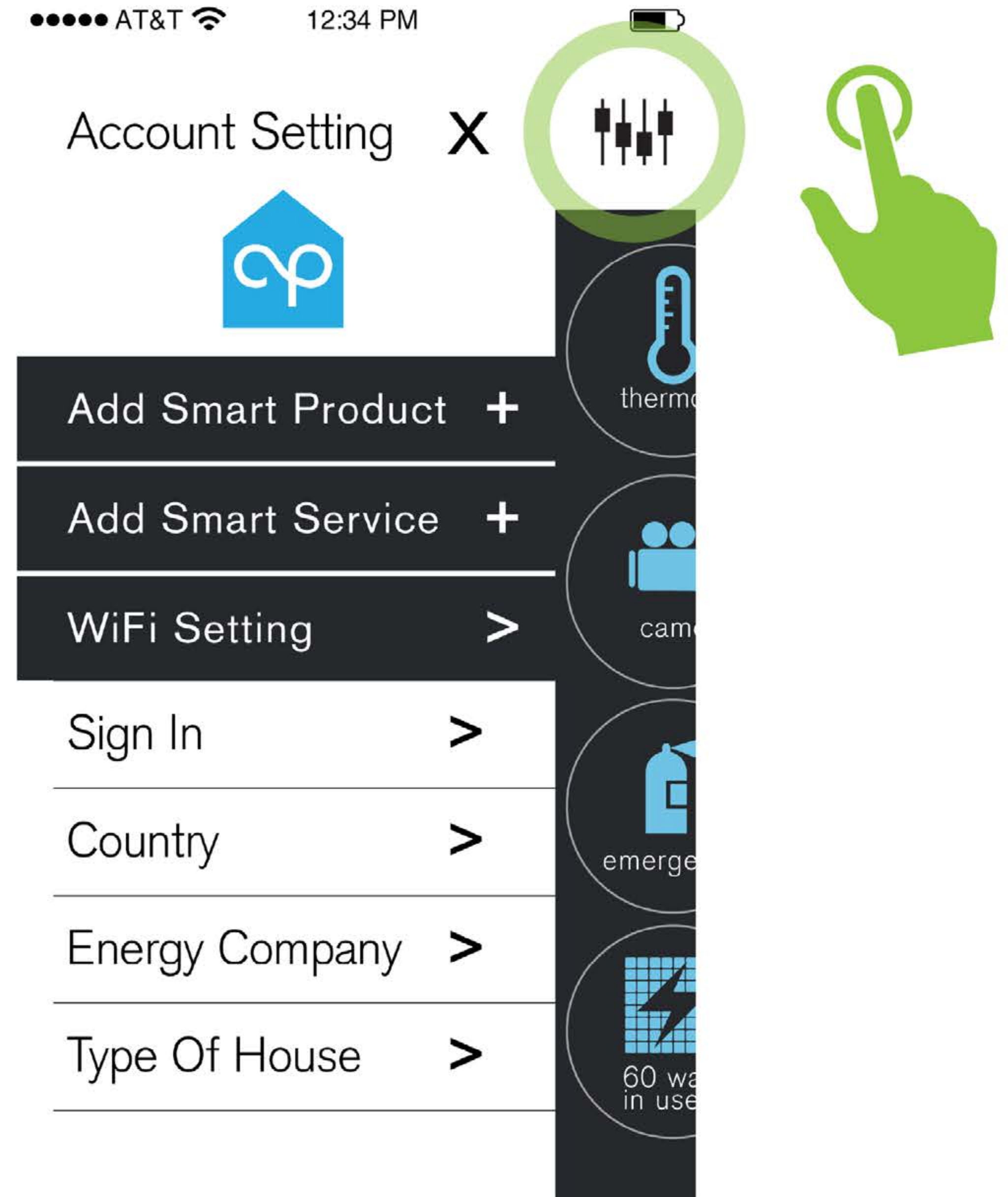


Gesture



STEP 5/20

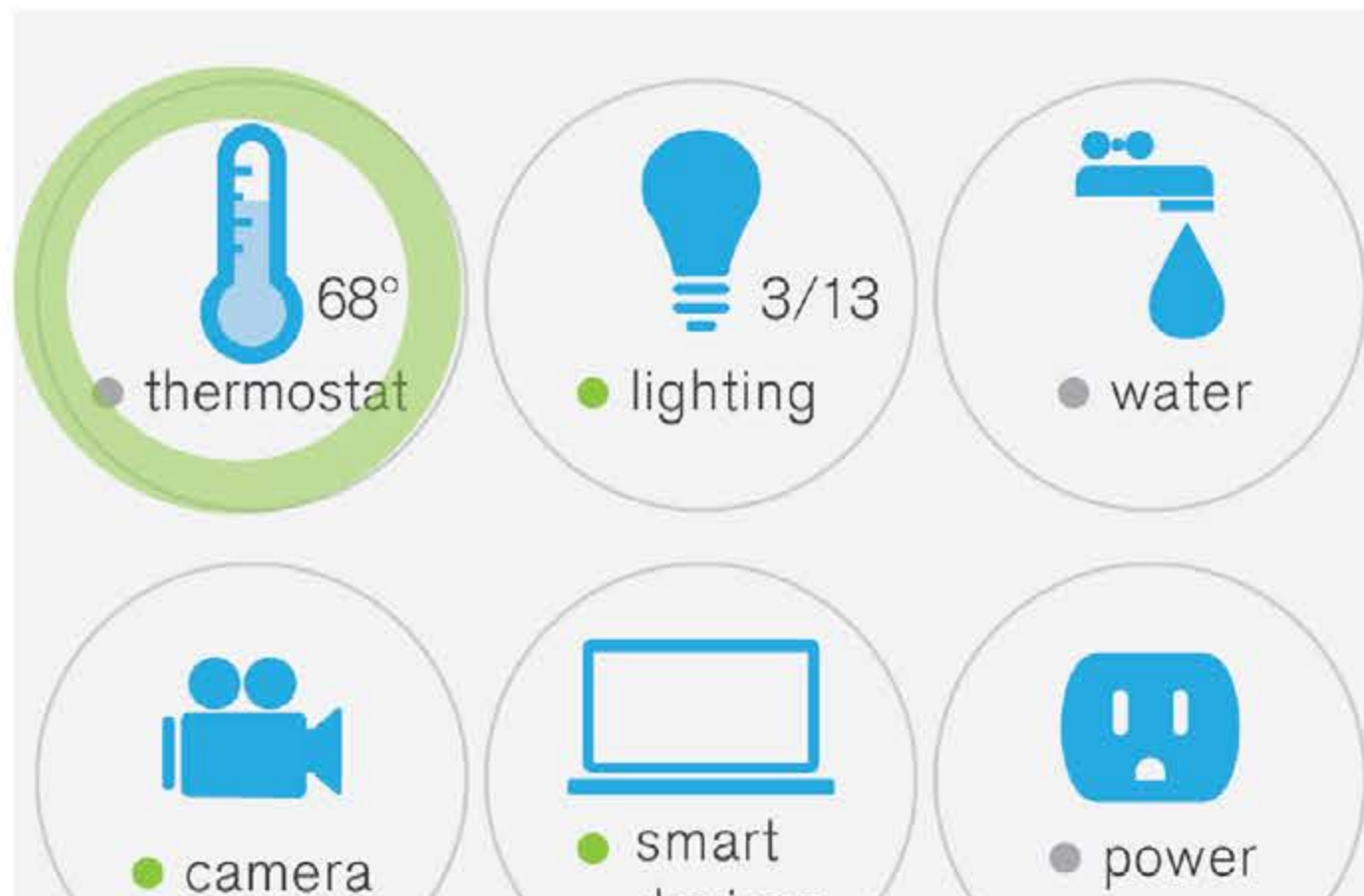
User should go to check their settings, such as wifi connection or sign in status before they use this app.



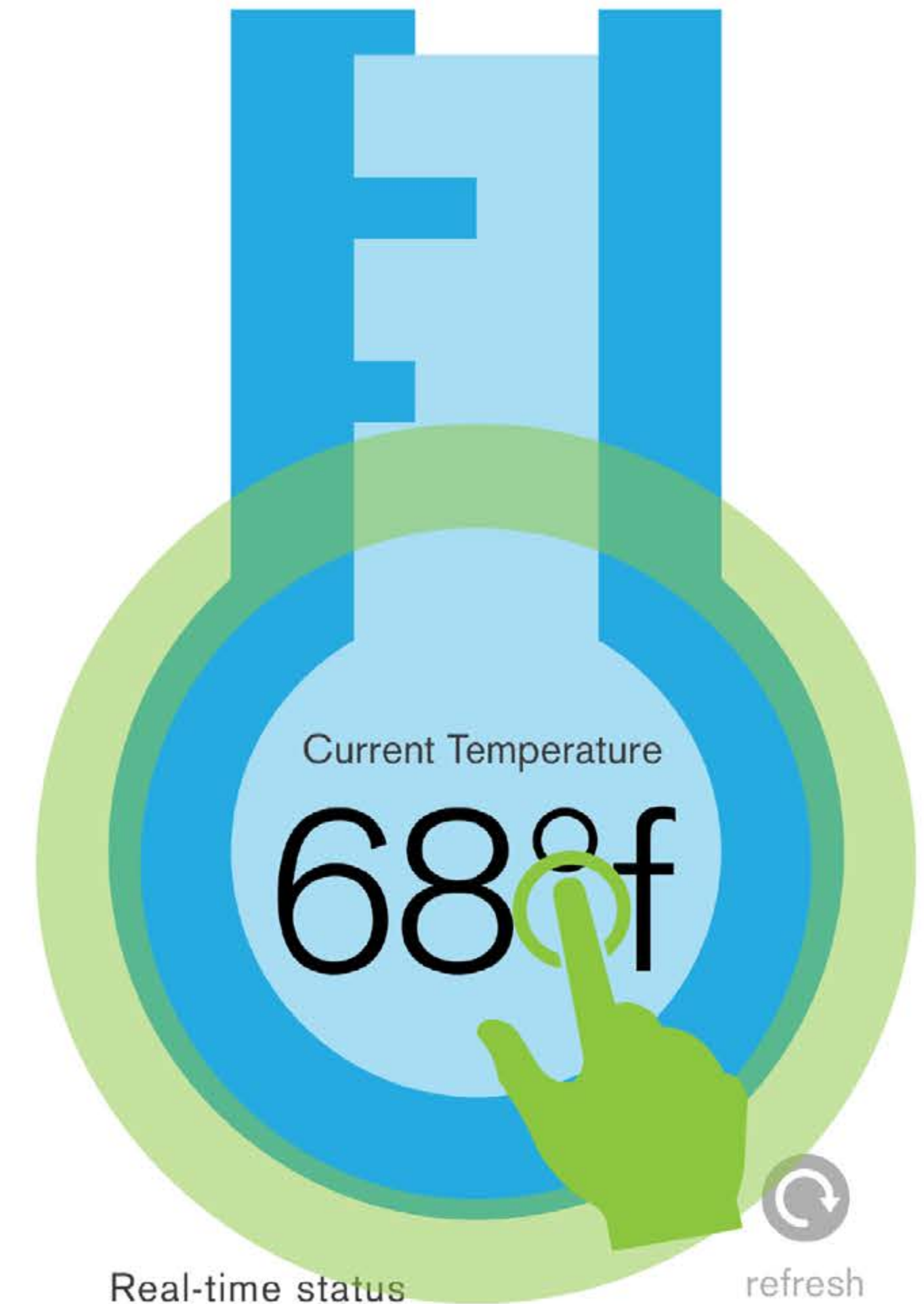
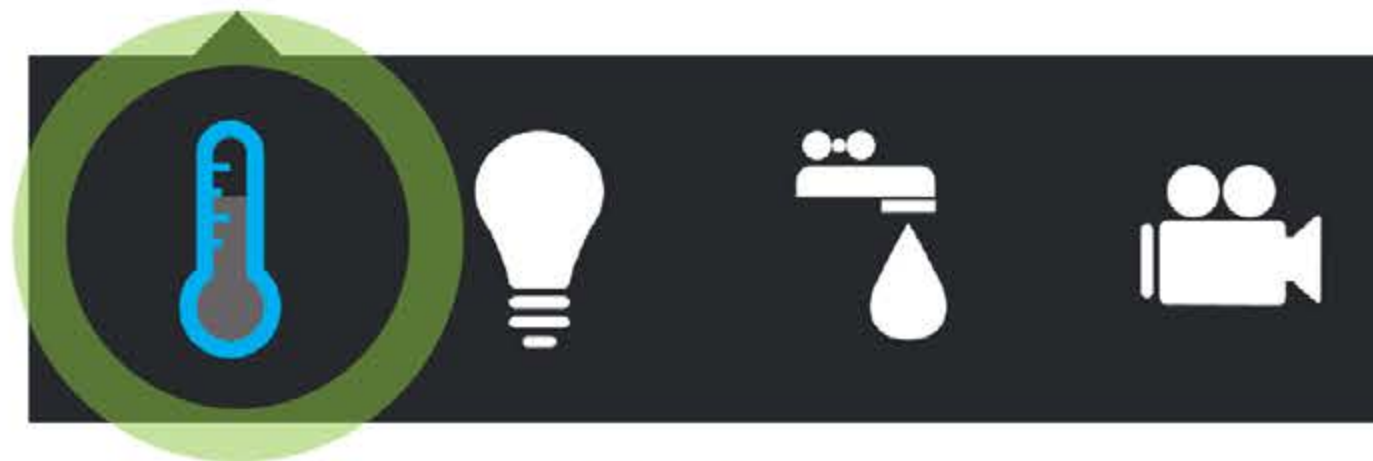
STEP 6/20

User can go to this page from menu page or the navigation bar at below the page.

●●●● AT&T 12:34 PM



You can touch this huge thermostat to control it.



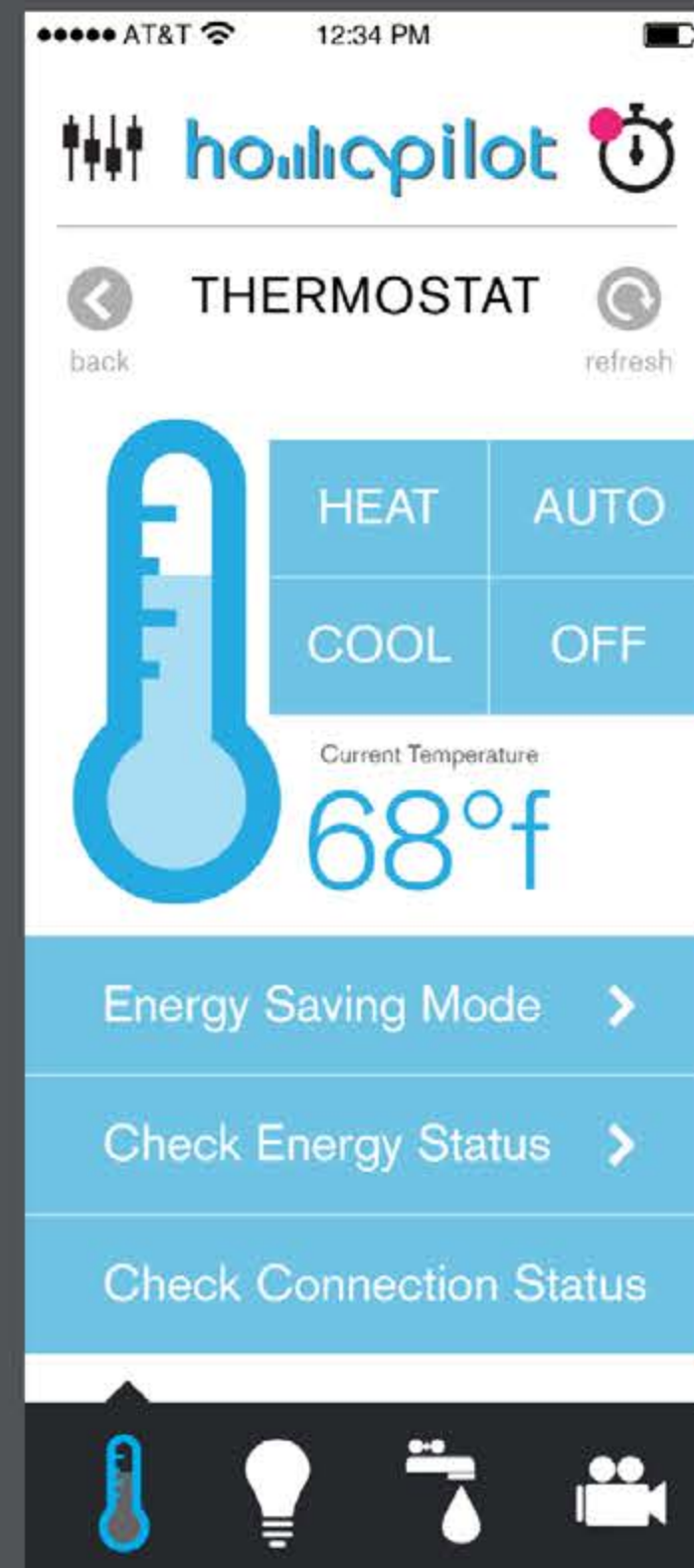
You can touch this huge thermostat to control it.



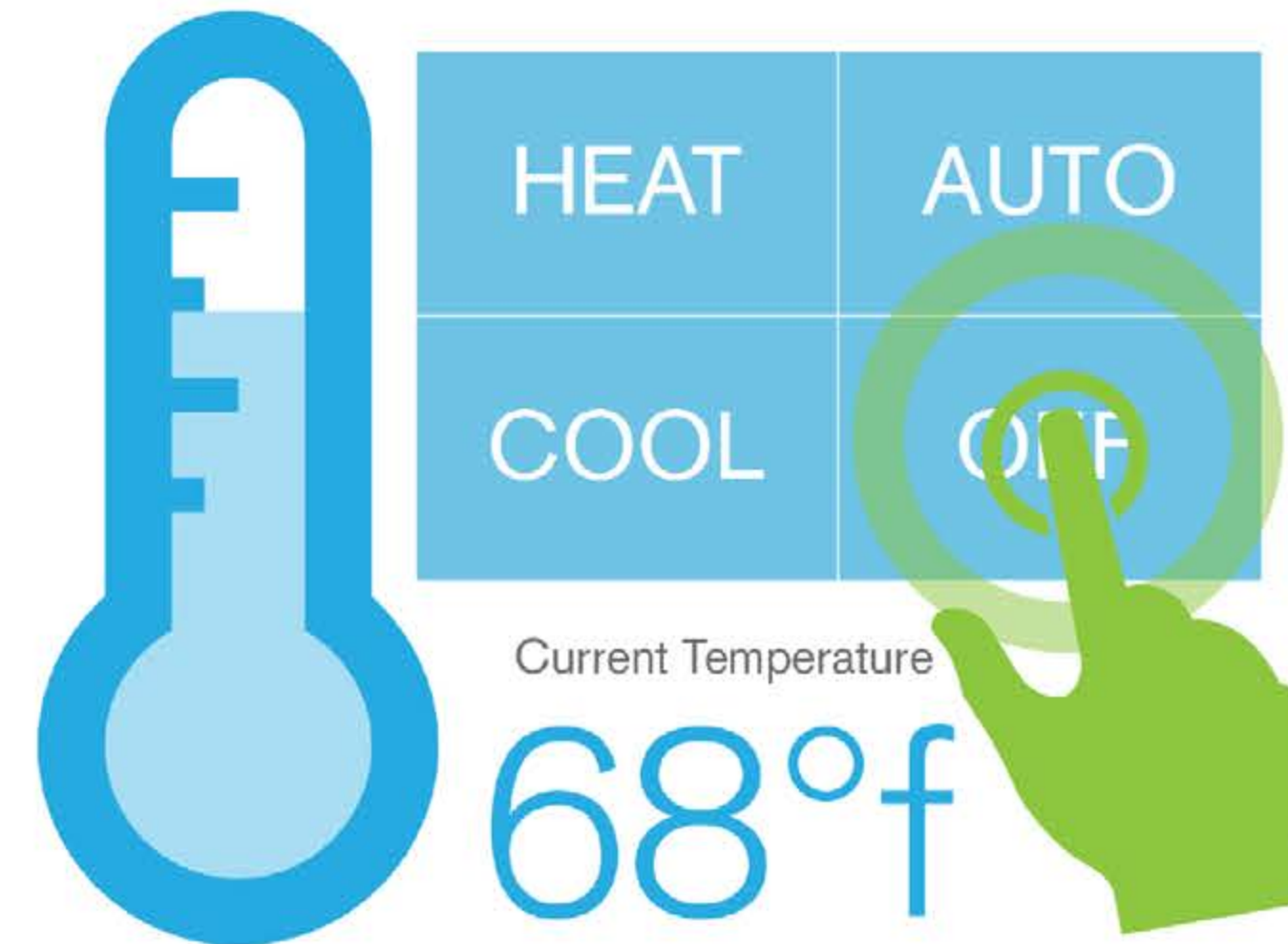
STEP 7/20

User will see this page this for control Thermostat smart devices.

Overall view



back THERMOSTAT refresh



Energy Saving Mode >

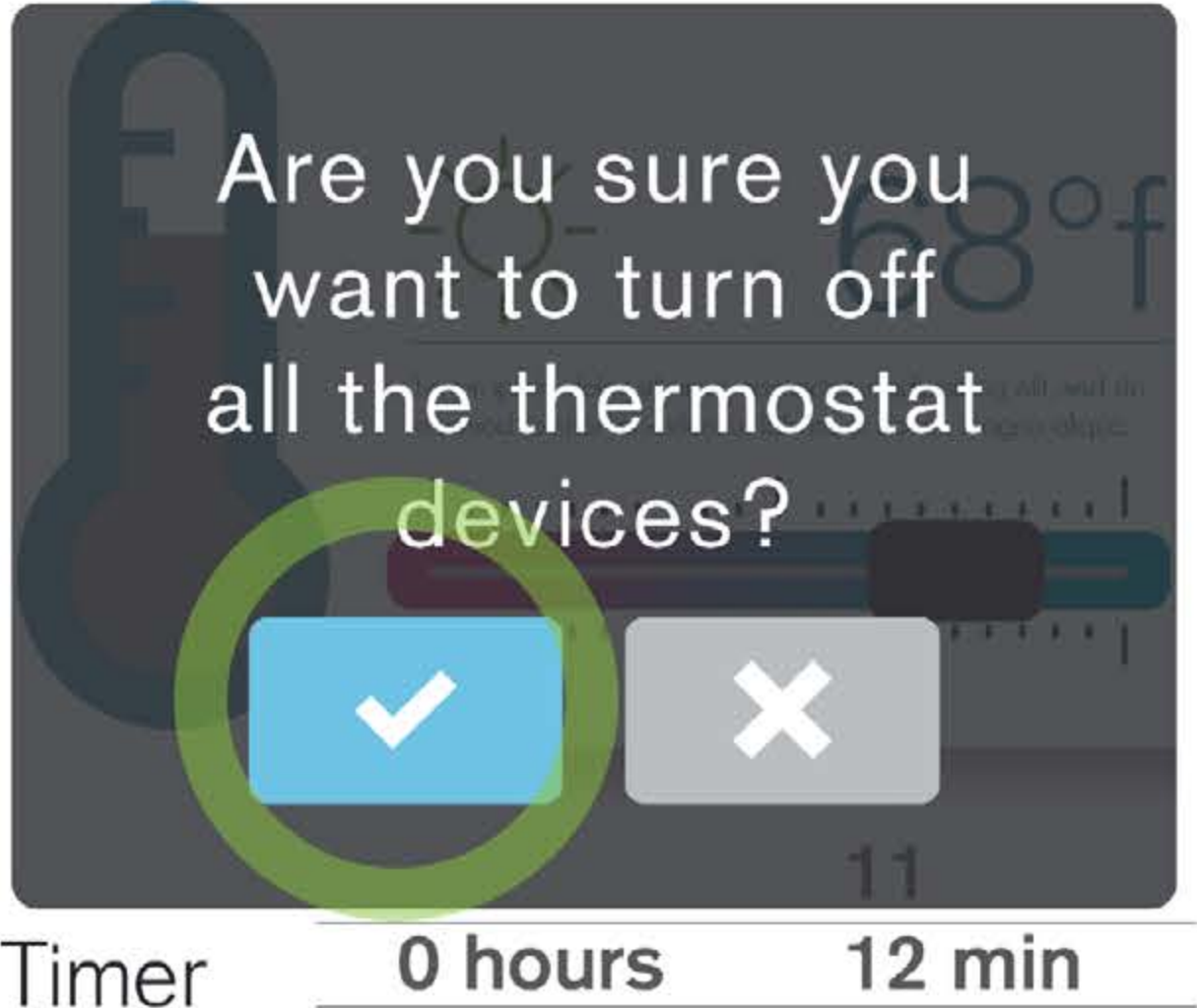
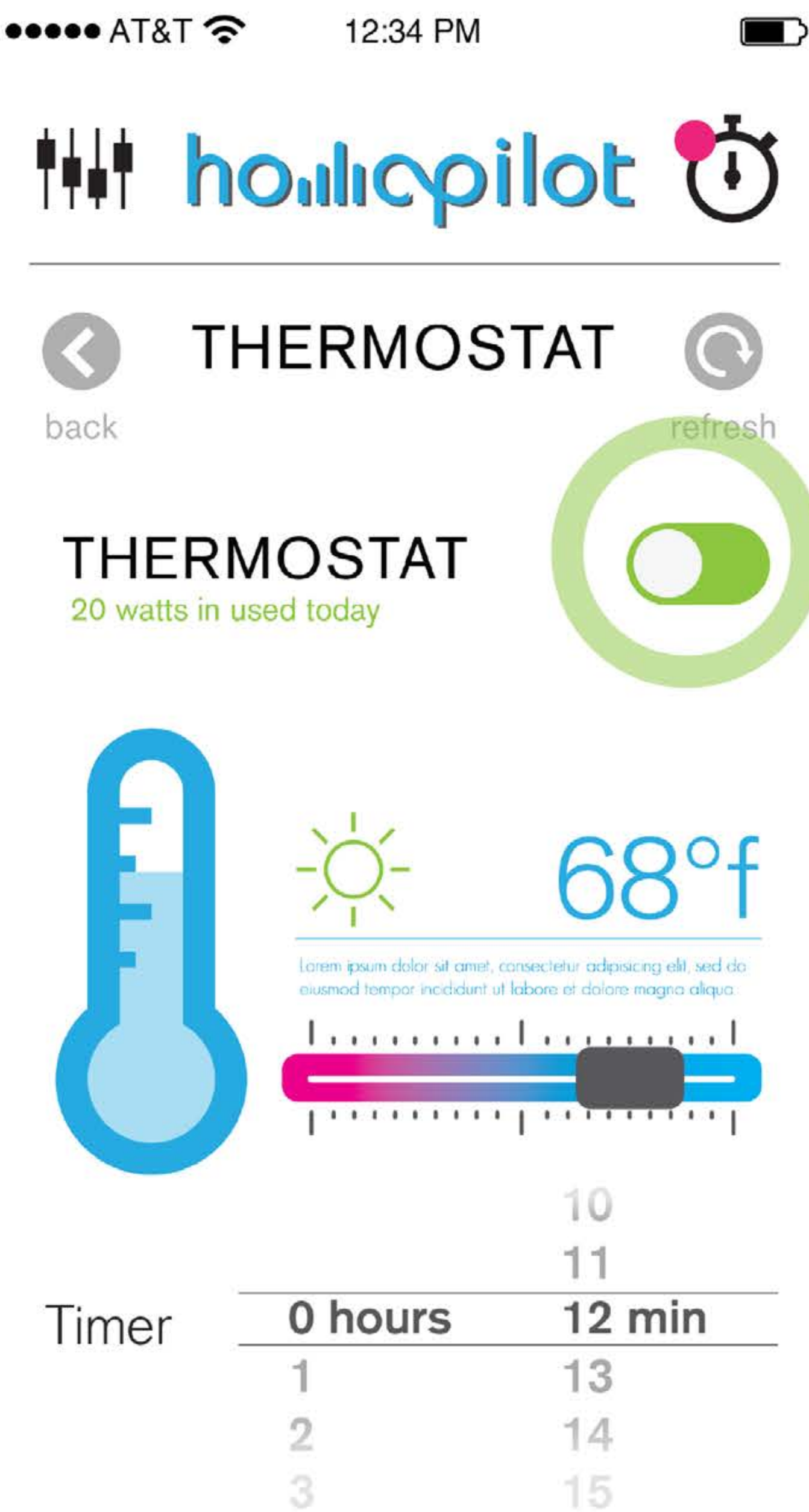
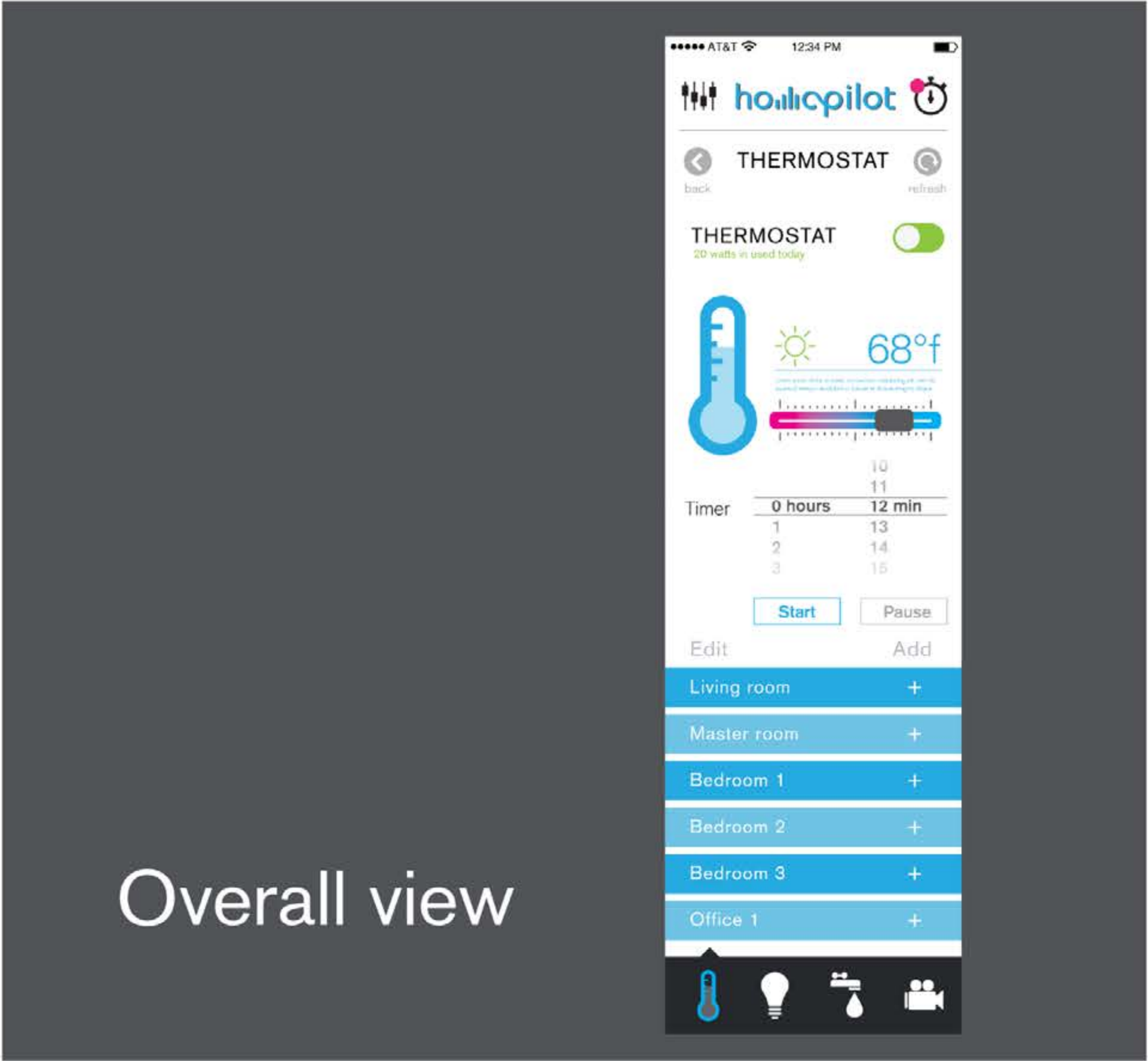
Check Energy Status >

Check Connection Status



STEP 8/20

User can turn off all the thermostat smart devices at once or separately.



STEP 9/20

User can use this navigation go to windows page.



STEP 10/20

You will go to Window page.



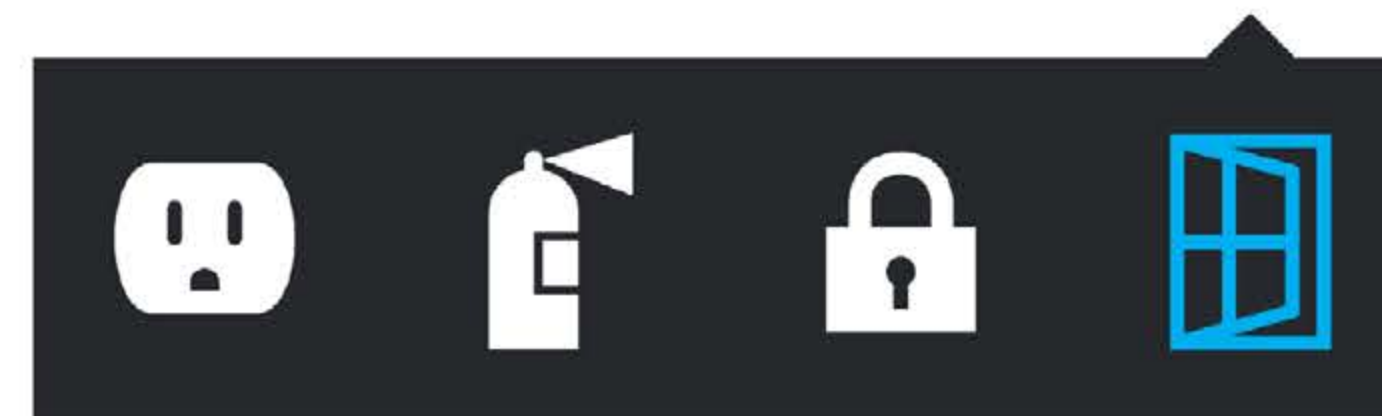
3 Windows Are Opened Right Now



Real-time status

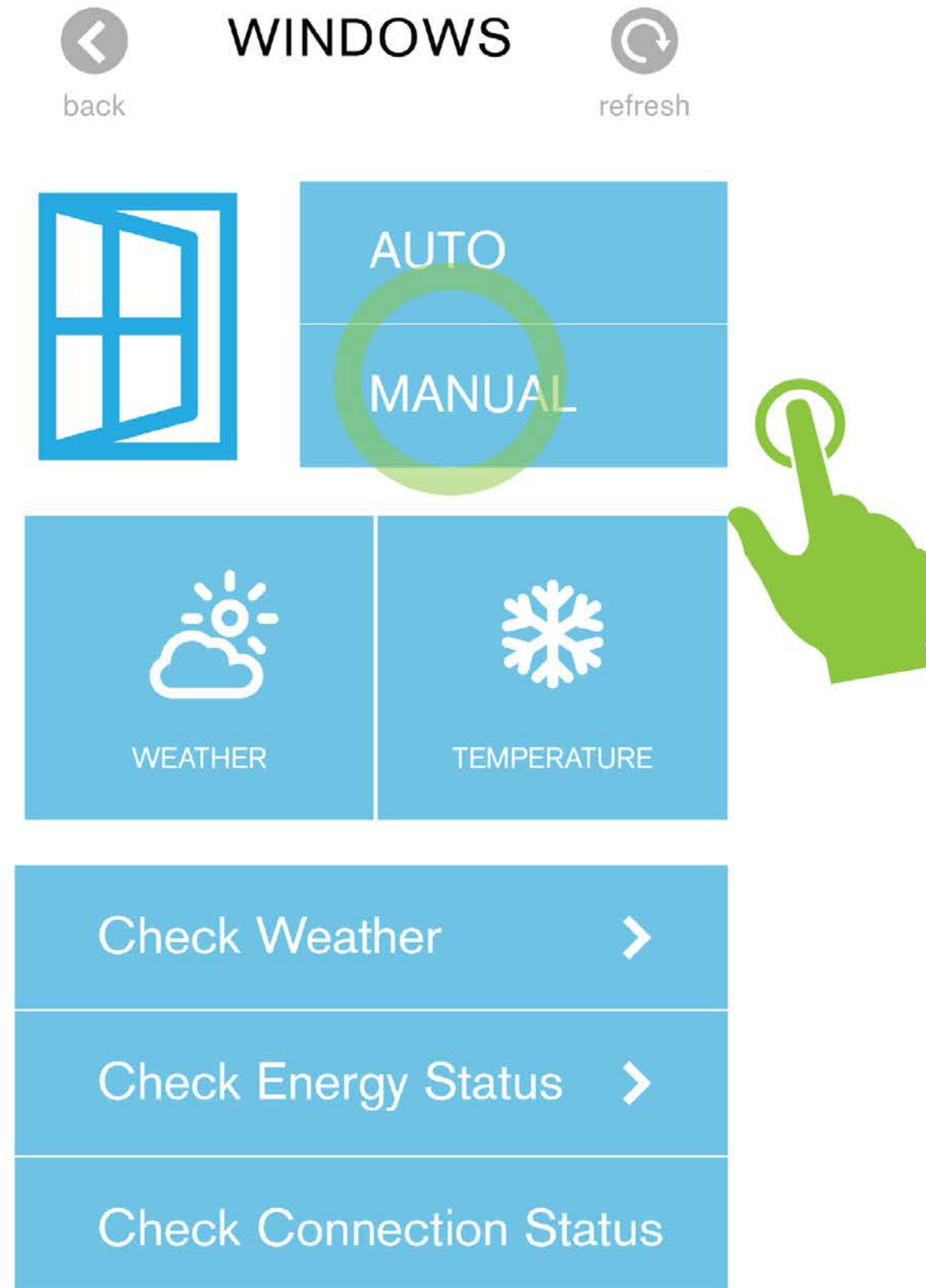
refresh

You can touch this huge window to control your smart windows at home.




STEP 11/20

And then go to touch the manual button to open window.




STEP 12/20


And then go to touch the manual button to open window.


back


WINDOWS



refresh

MANUAL SETTING


All Open /
Close windows

3 windows are opened right now




Mostly Warm

78°f
outdoor

68°f
indoor

Current weather

Today

Thursday

Now


1pm


2pm


3pm


4pm


5pm



68


68


68


66


60


58

Edit

Add

Living room

+

Bedroom 1

+

Bedroom 2

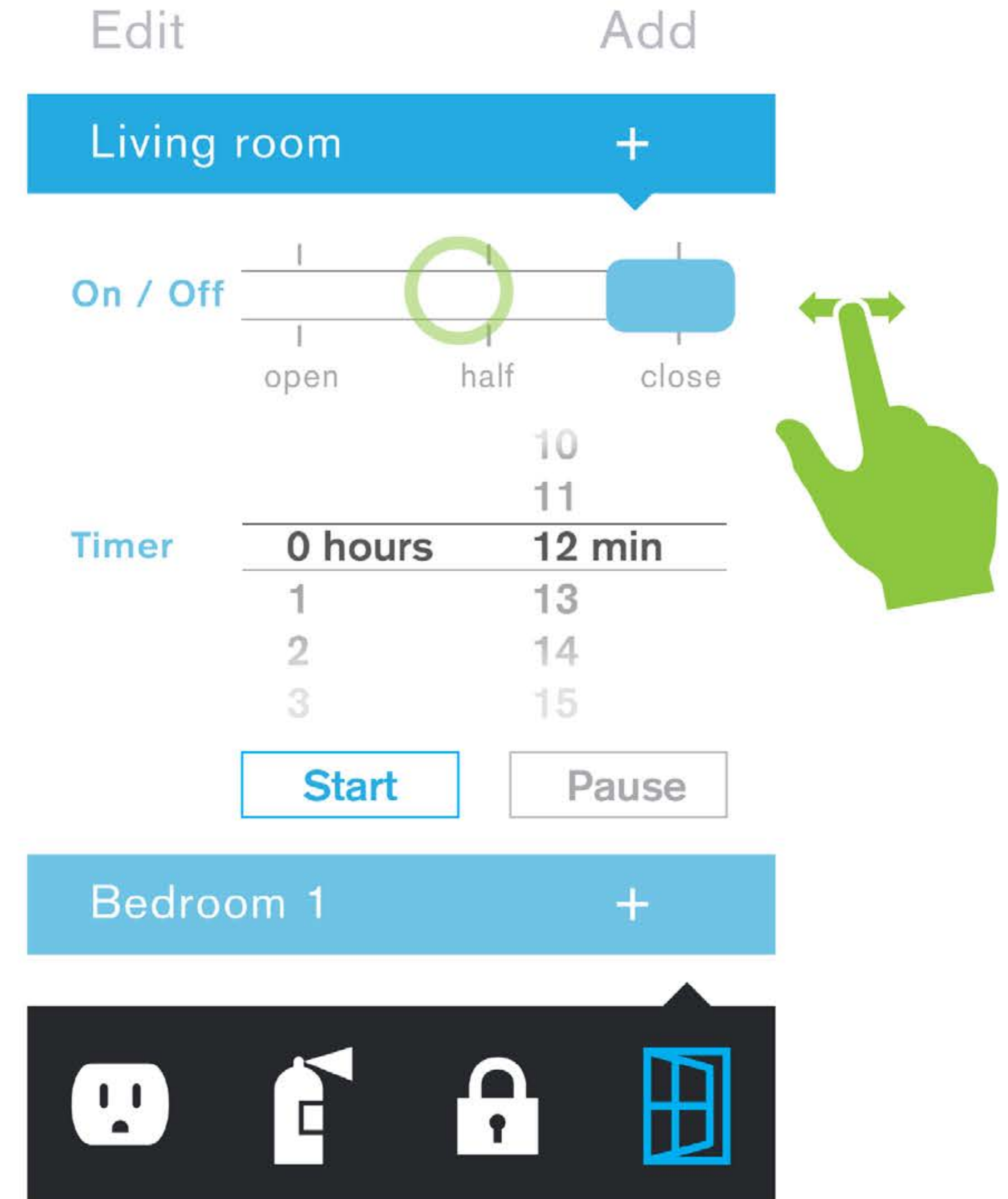
+



STEP 13/20

Here is letting you do setting on your smart window.

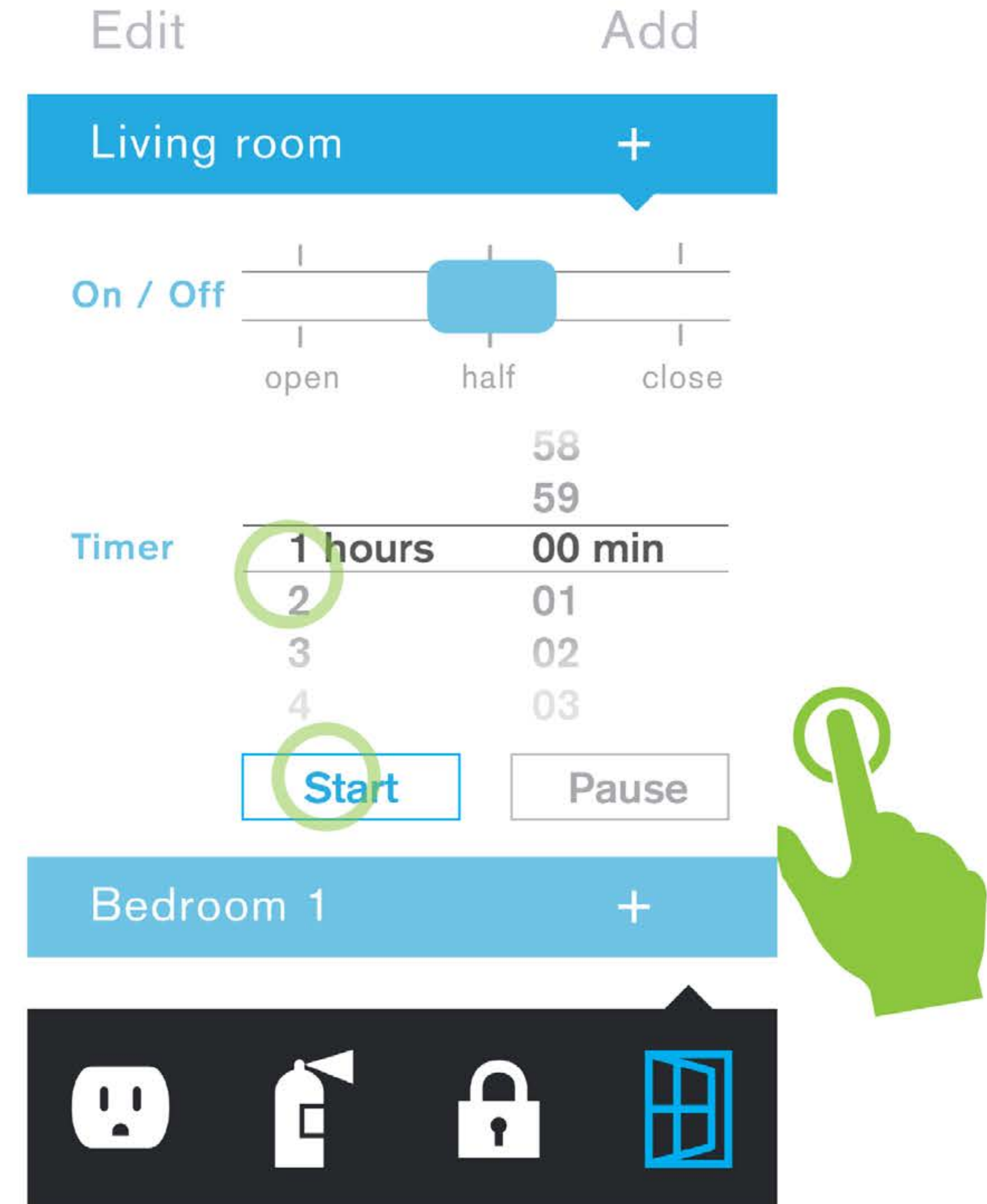
Open half of the window



STEP 14/20

Here is letting you do setting on your smart window.

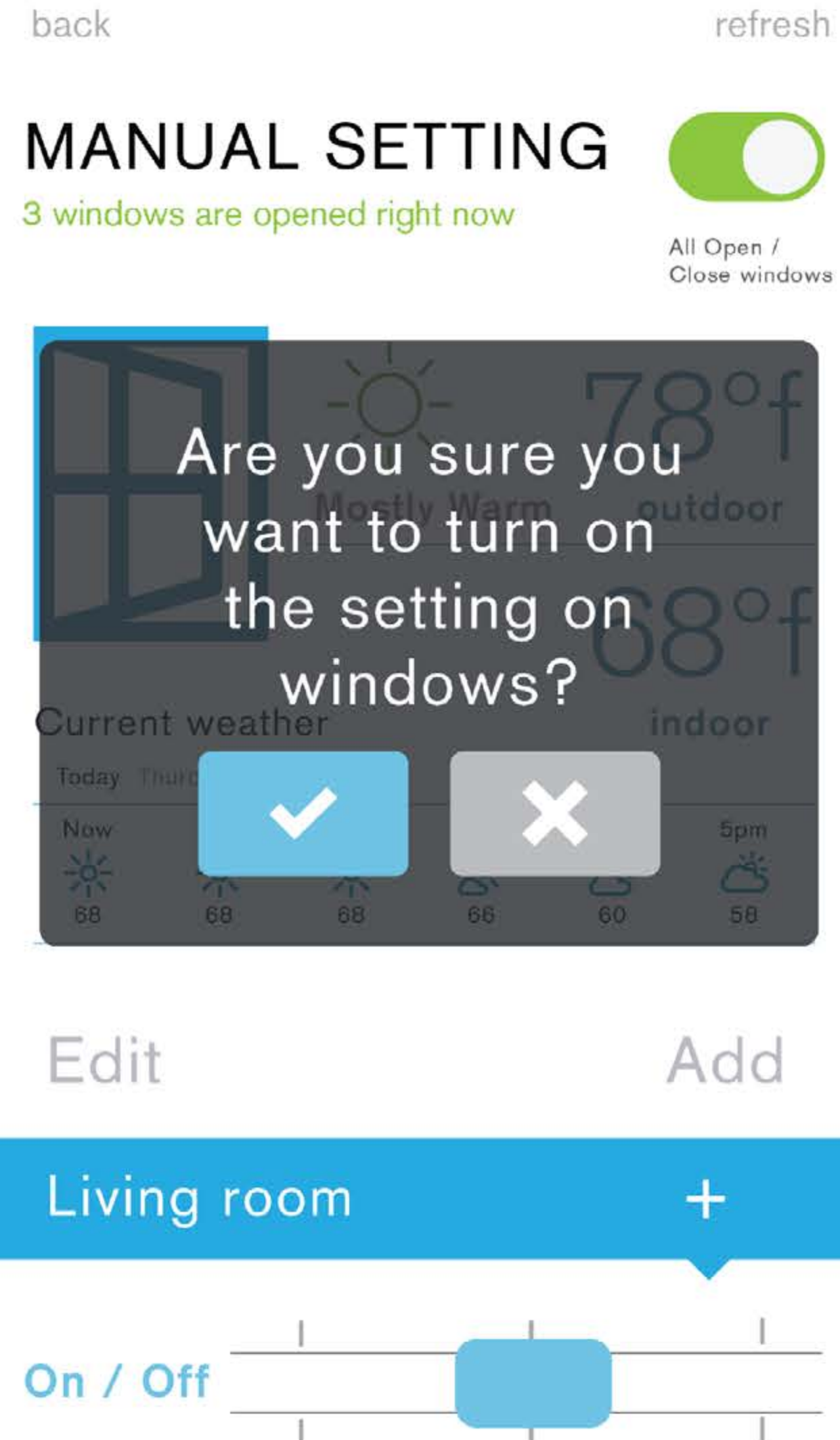
Time: 1 hour
and the touch the start button



STEP 15/20

Here is letting you do setting on your smart window.

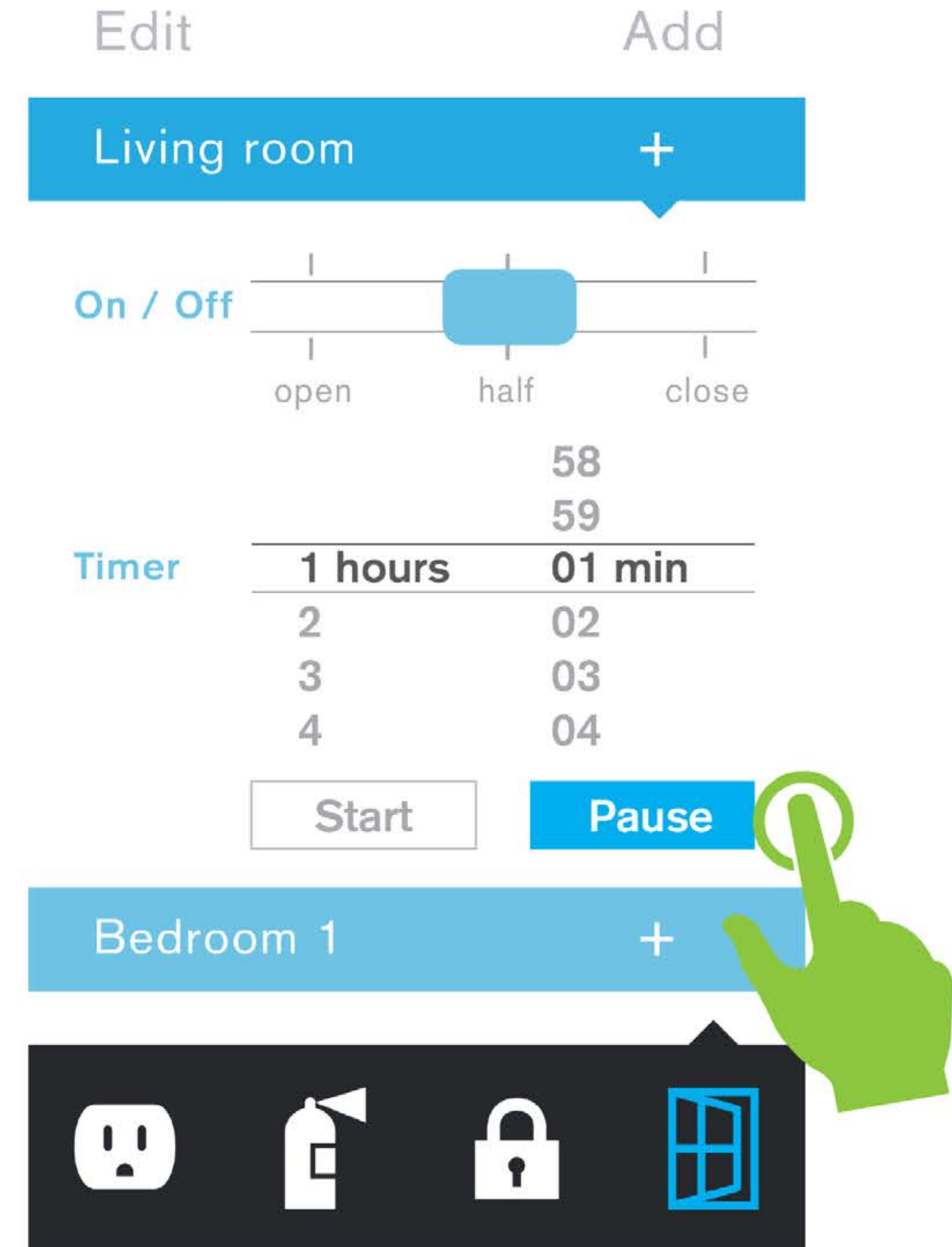
Confirmation



STEP 16/20

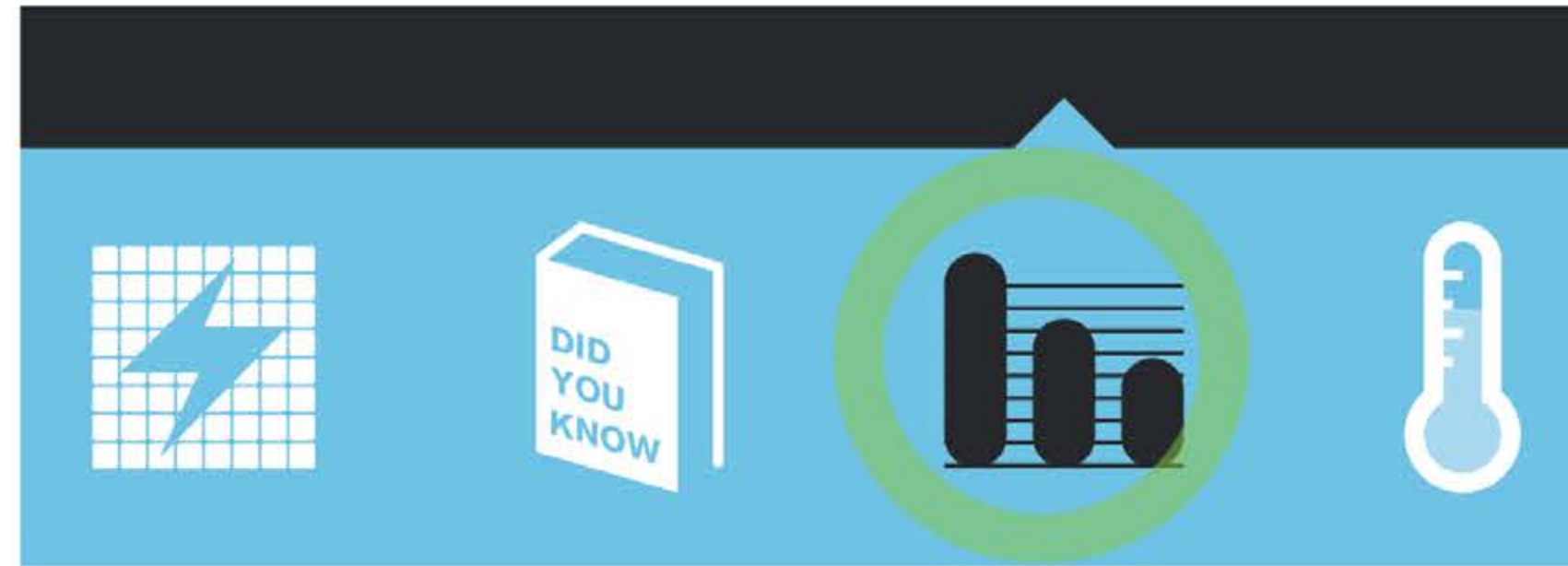
Here is letting you do setting on your smart window.

You can adjust it again, if you want.



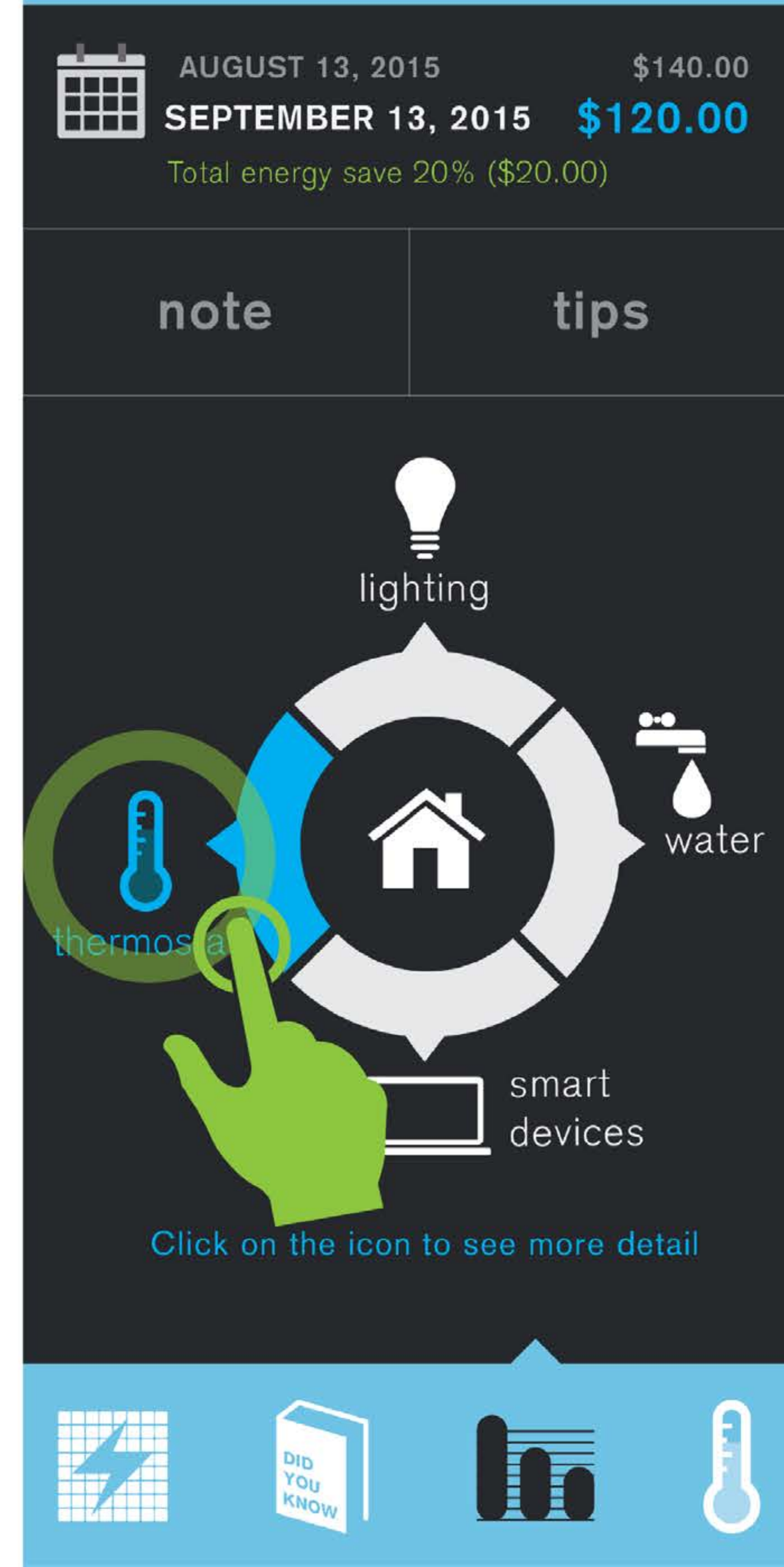
STEP 17/20

User can use this navigation go to My Energy page.



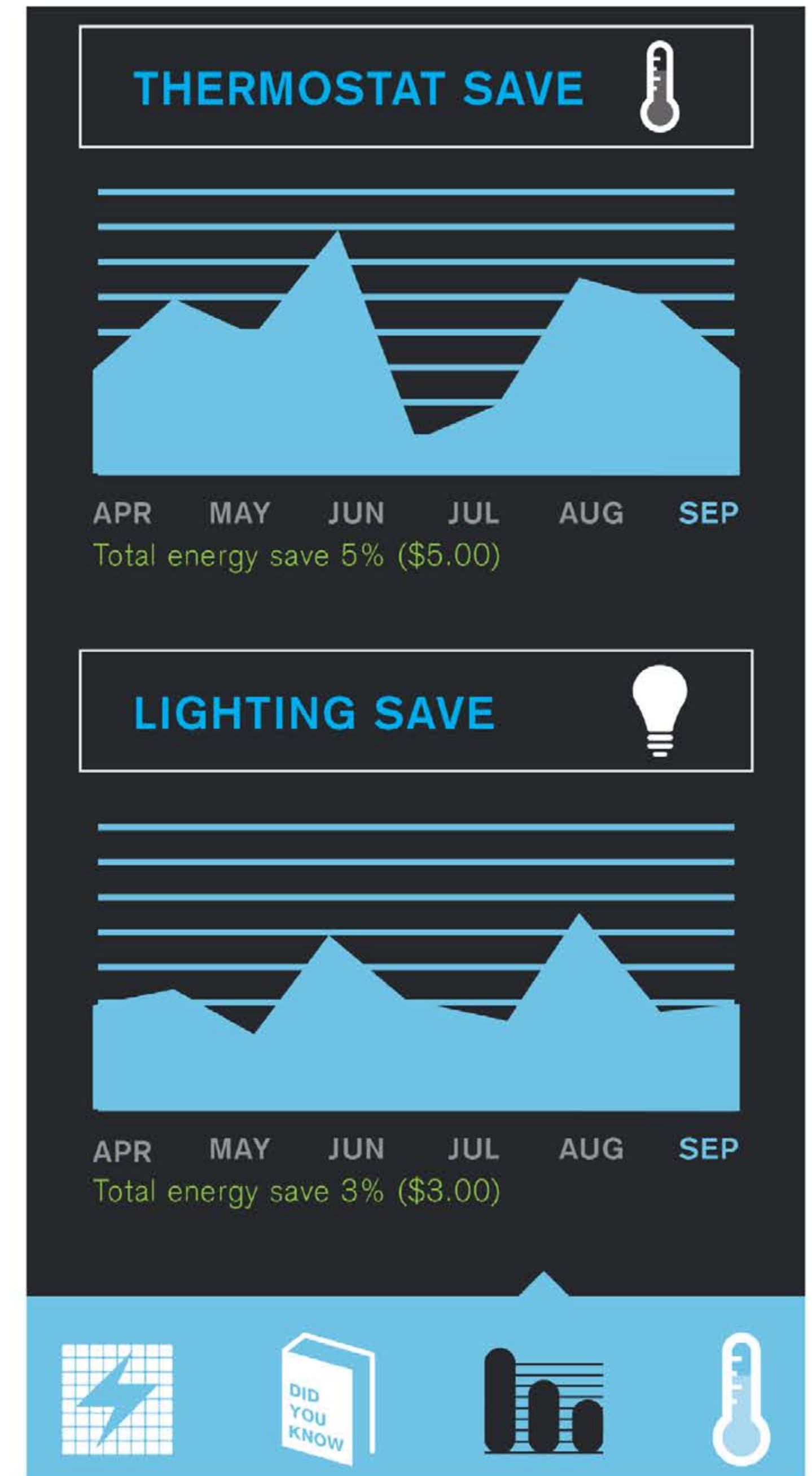
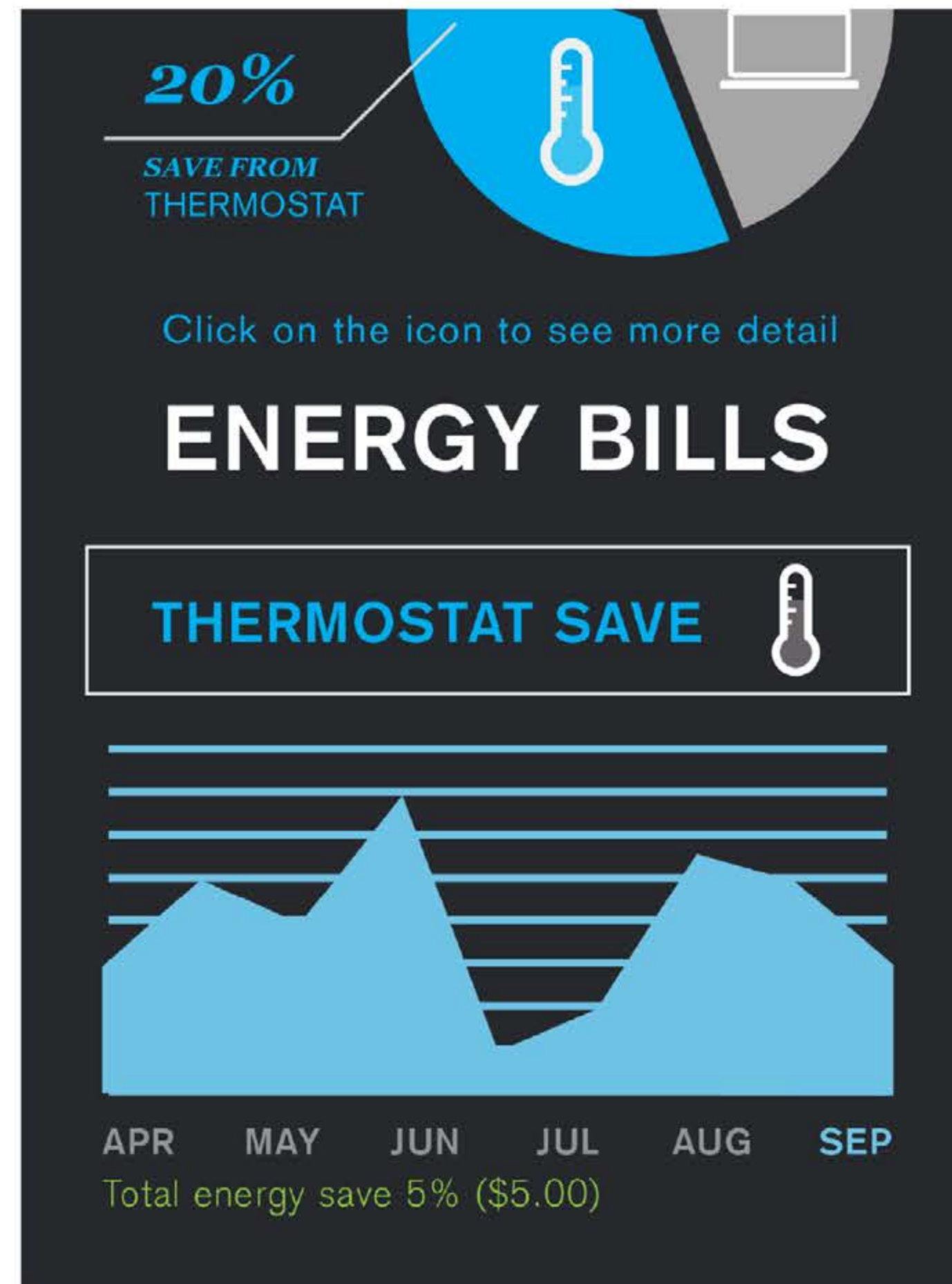
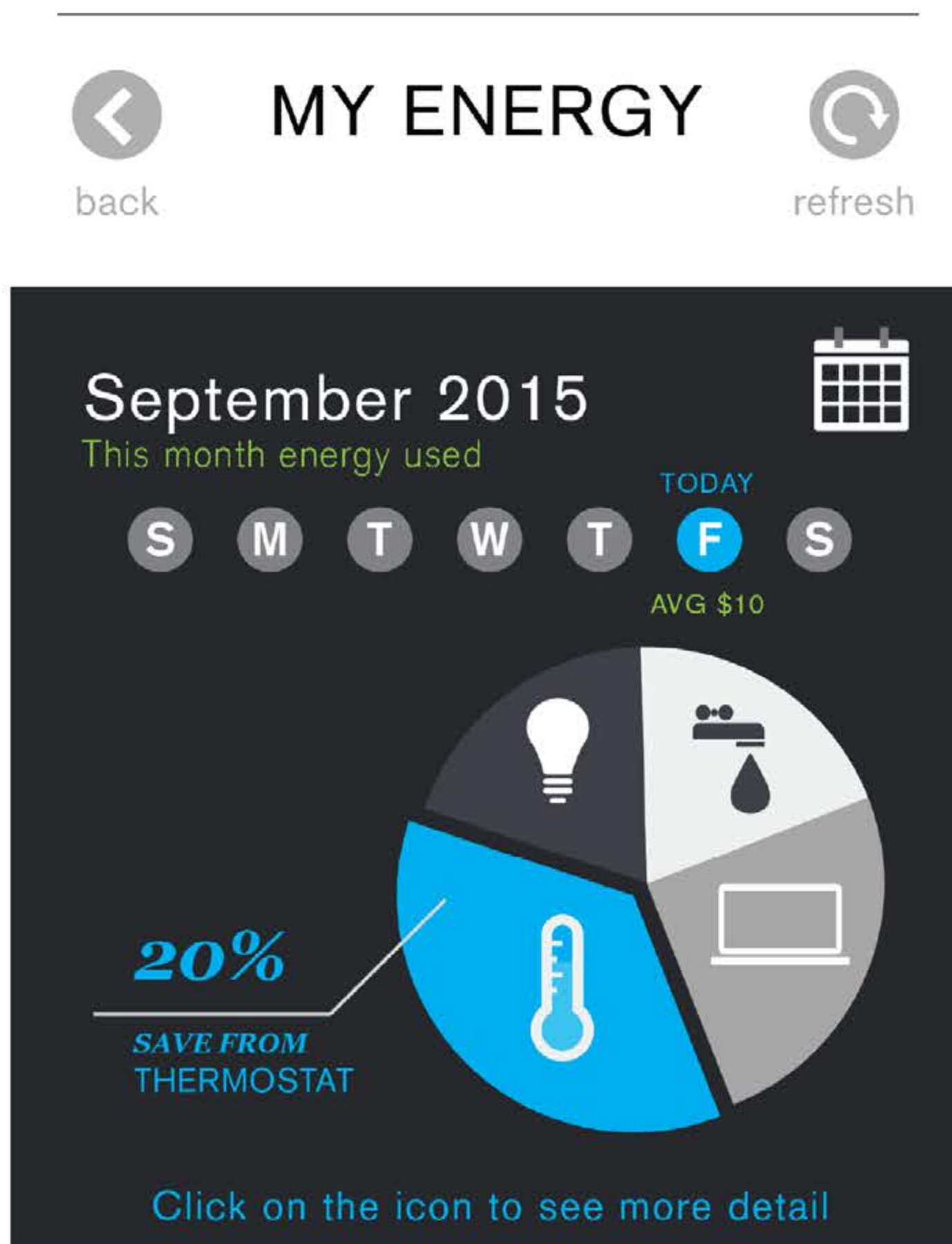
STEP 18/20

You will go to My Energy page



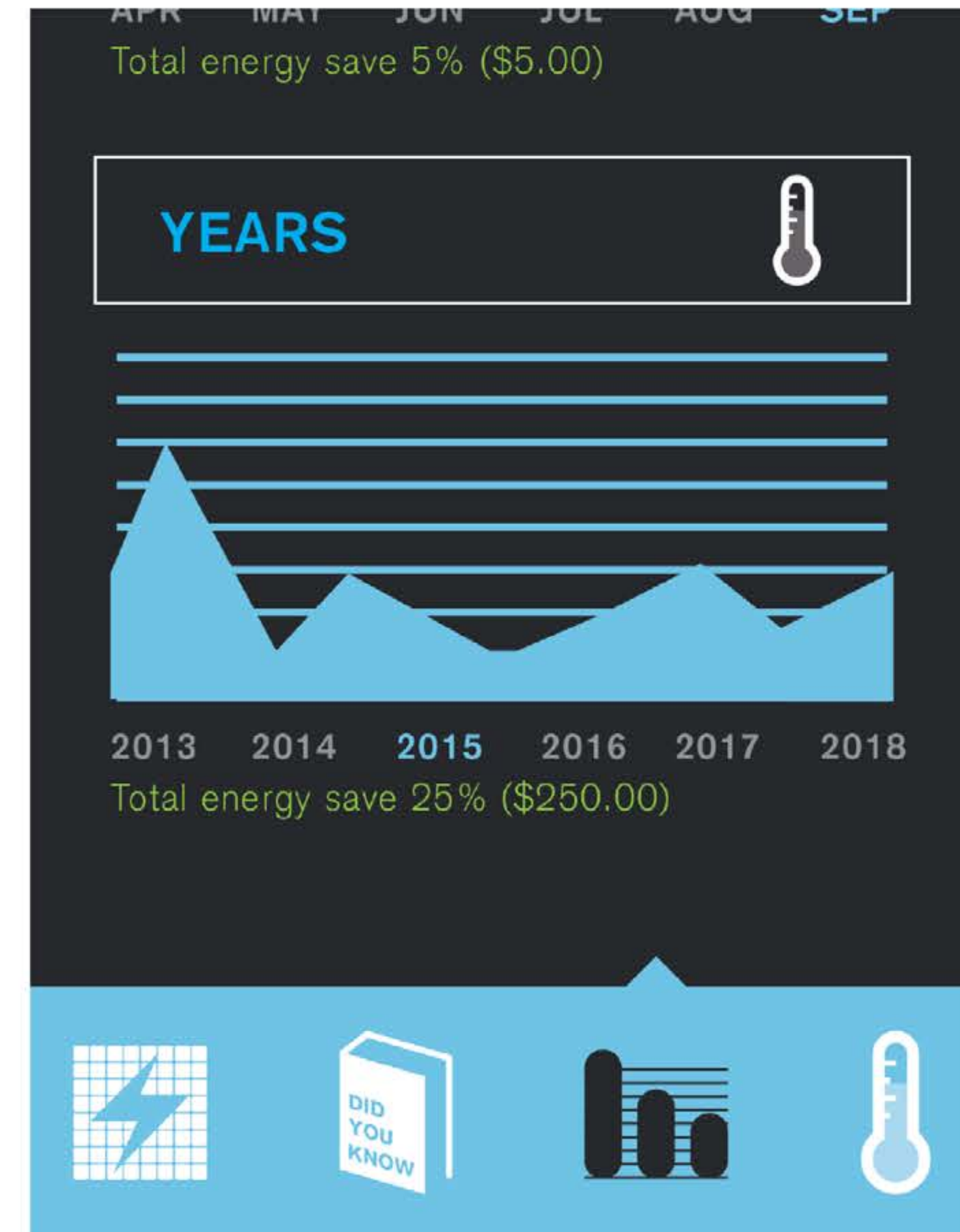
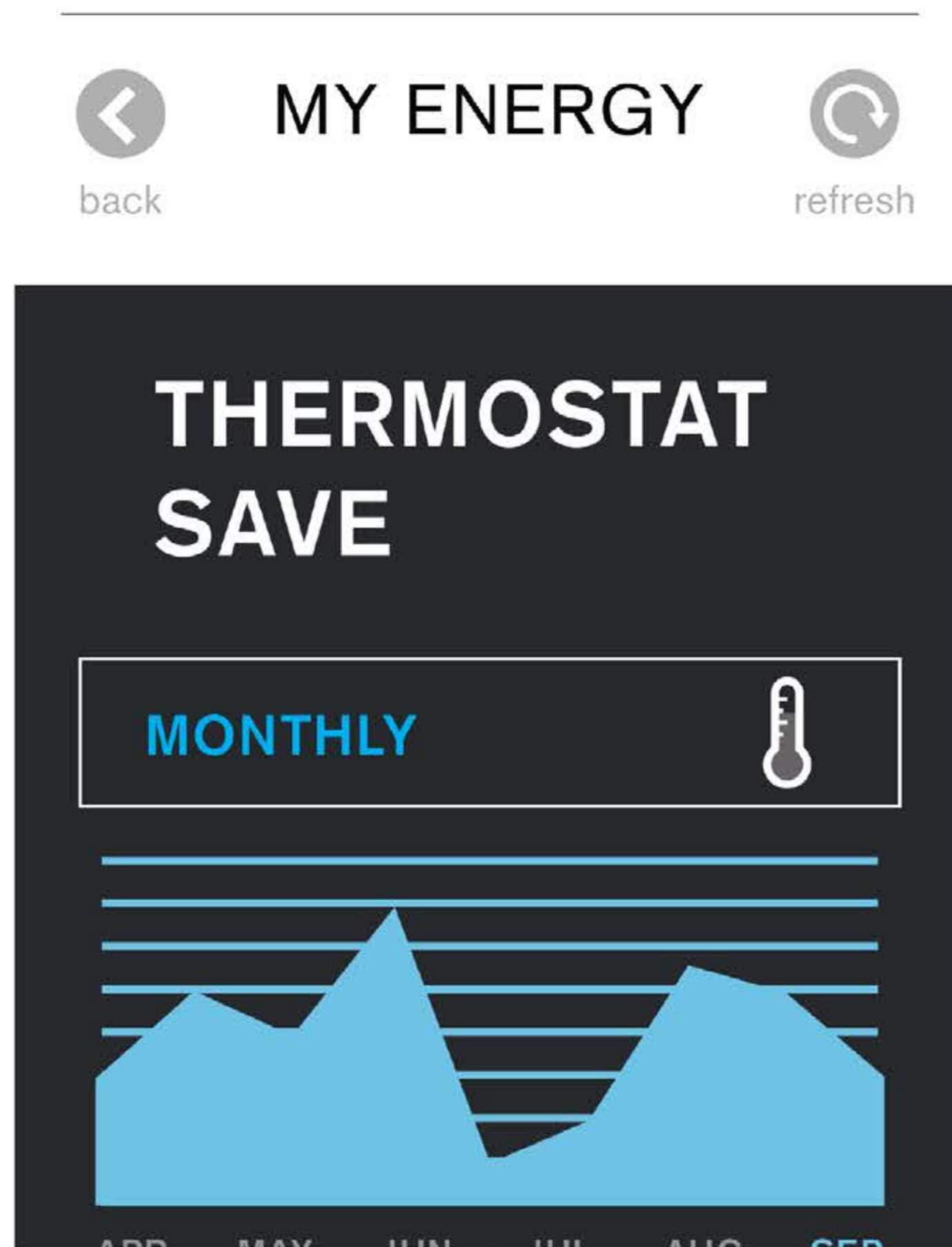
STEP 19/20

User can use this My Energy page to check their energy used.



STEP 20/20

User can see their energy used by month or year through the charts.



Proof of Concept



This is about Adalene's background and education.

Visual Design



This is about Adalene's background and education.

N A M E O F T H E P R O D U C T

home 2.0

home

homeland

homeipper

homemaster

hometroller

homey

homie

hommatic

housemetic

homemaster

Your environment under your control

Home 2.0

All in one control

hommatic

smart control

home

Your home in the palm of your hand

homepilot ♥

homepilot

“Your environment under your control”

“Your home in the palm ♥ of your hand”

“All in one control”



MOODBOARD # 1

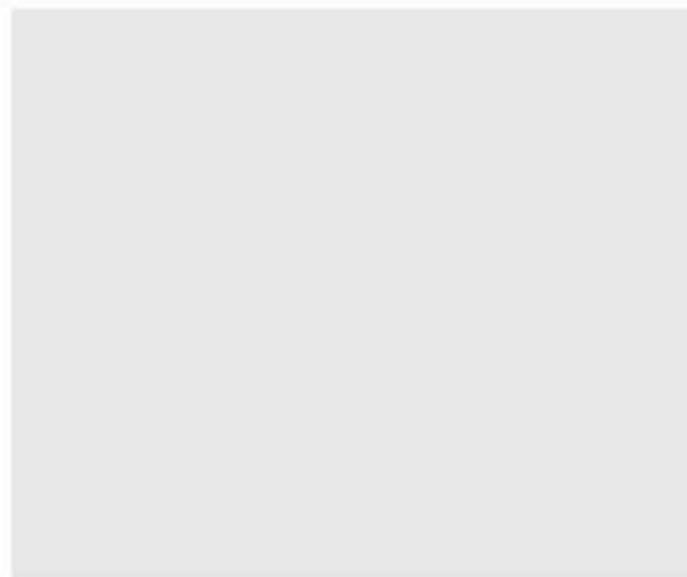
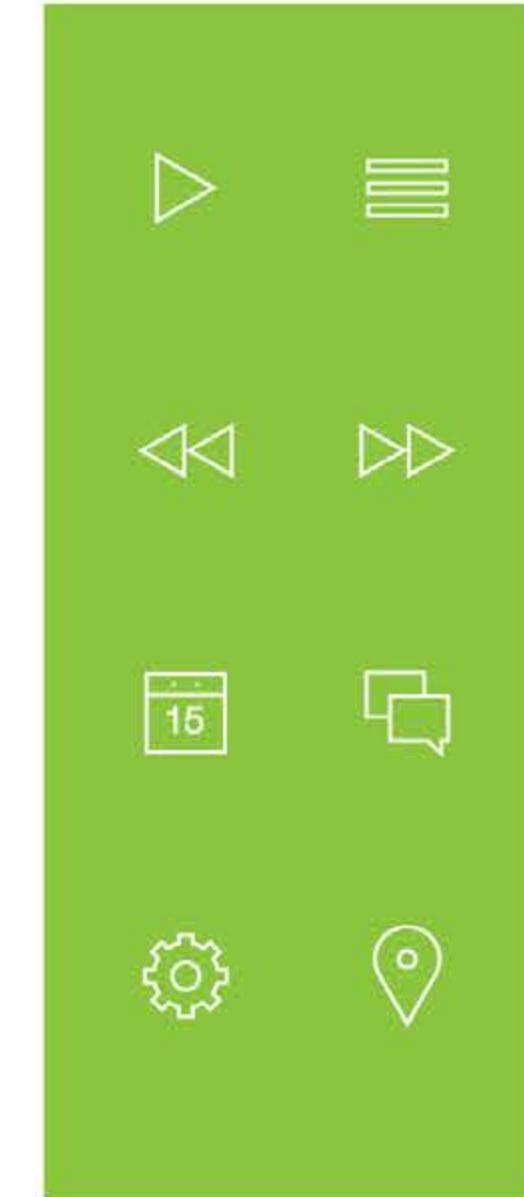
style Earth friendly, Nature, Organic



Texture



Line Icons

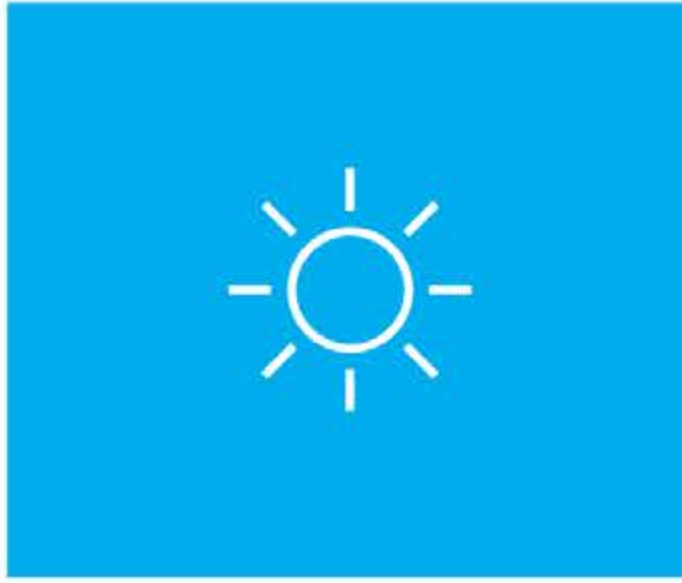


TYPOGRAPHY

QWERTYUIOPASDFGHJKLZXCVBN-
M{}|: "<>?!@#\$\$%^&*()!1234567890

Typeface: Calvert



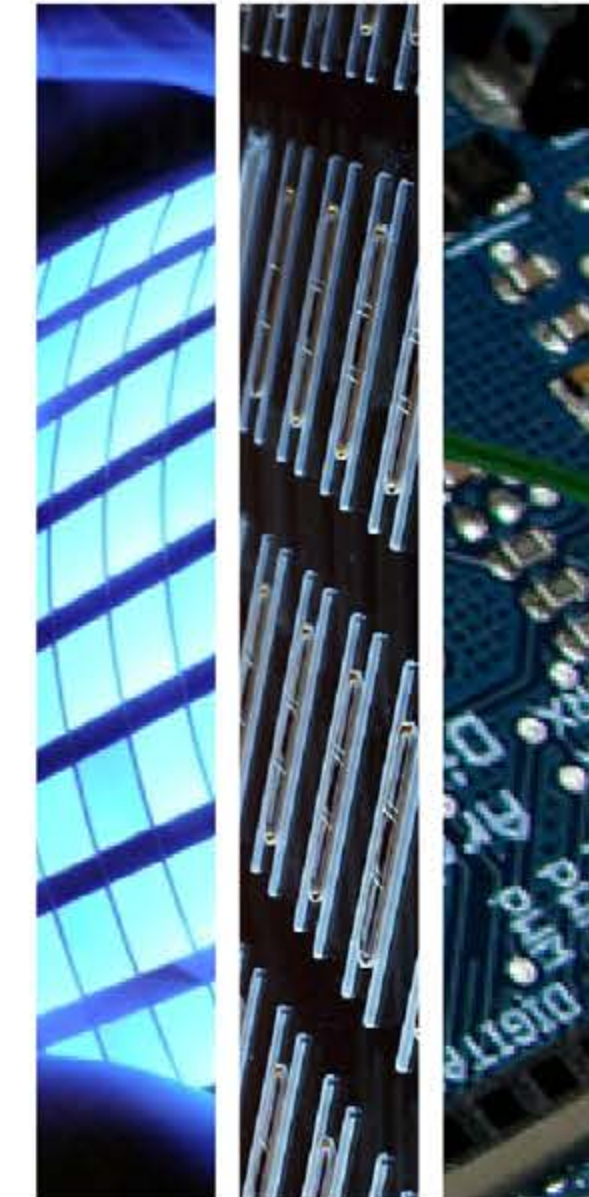


MOODBOARD # 2

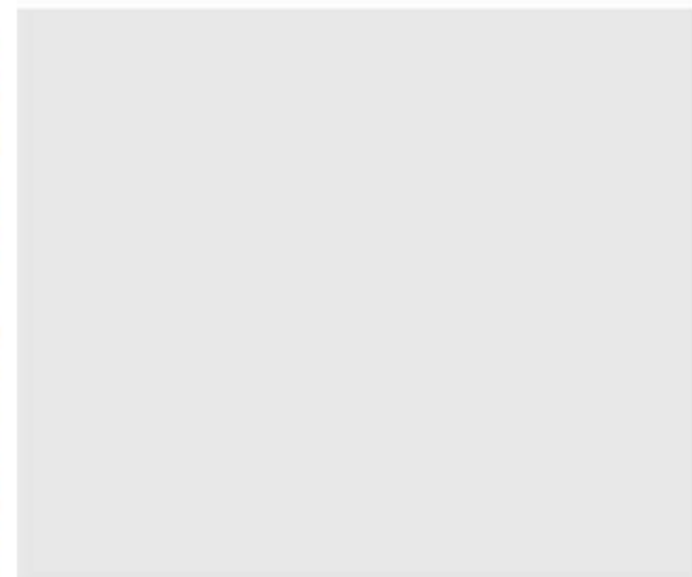
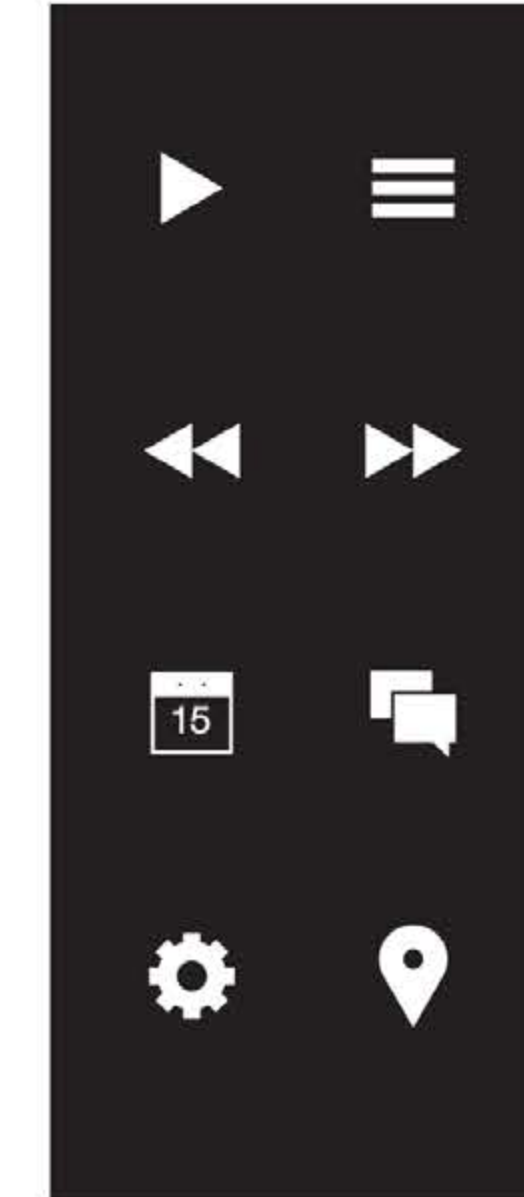
style high tech, innovate, futuristic



Texture



Full Icons



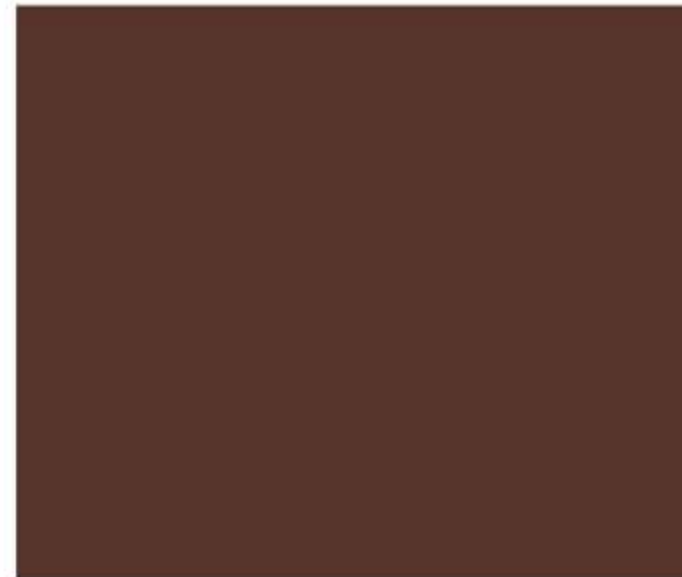
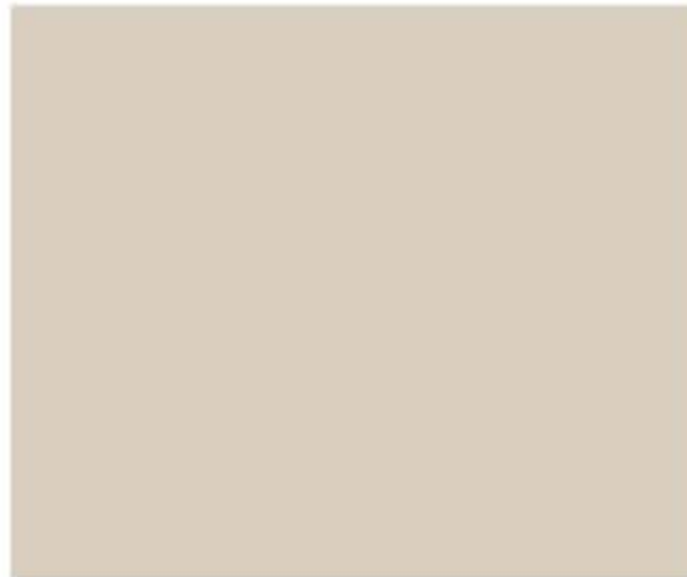
TYPOGRAPHY

QWERTYUIOPASDFGHJKLZXCVBN-
M{}|!:"<>?!@#\$\$%^&*()!1234567890

Typeface: Akzidenz Grotesk

Final





MOODBOARD # 3

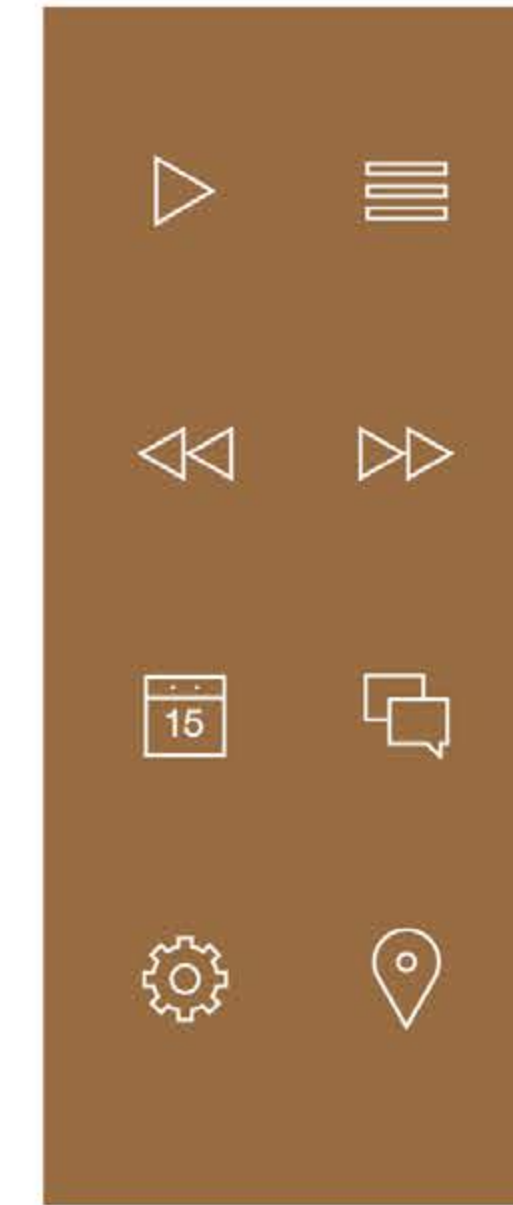
style homestyle, save, secure, family



Texture



Full Icons



TYPOGRAPHY

QWERTYUIOPASDFGHJKLZXCVBN-
M{}|:"<>?!@#\$\$%^&*()!1234567890

Typeface: Book Antiqua





MOODBOARD # 4

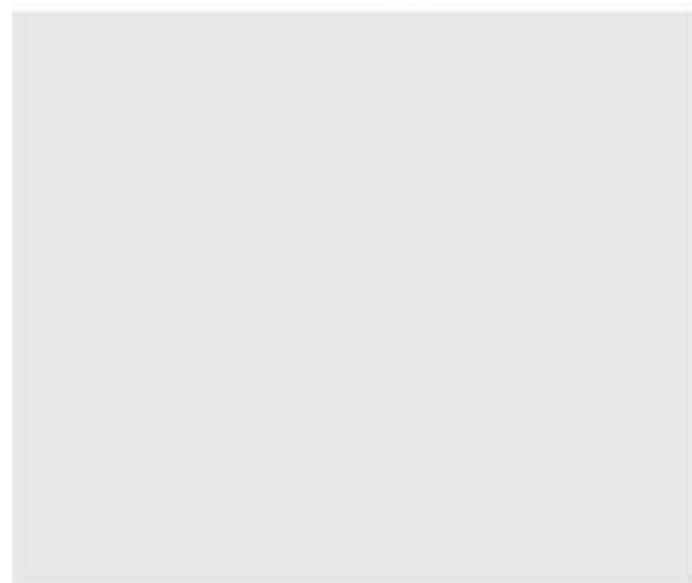
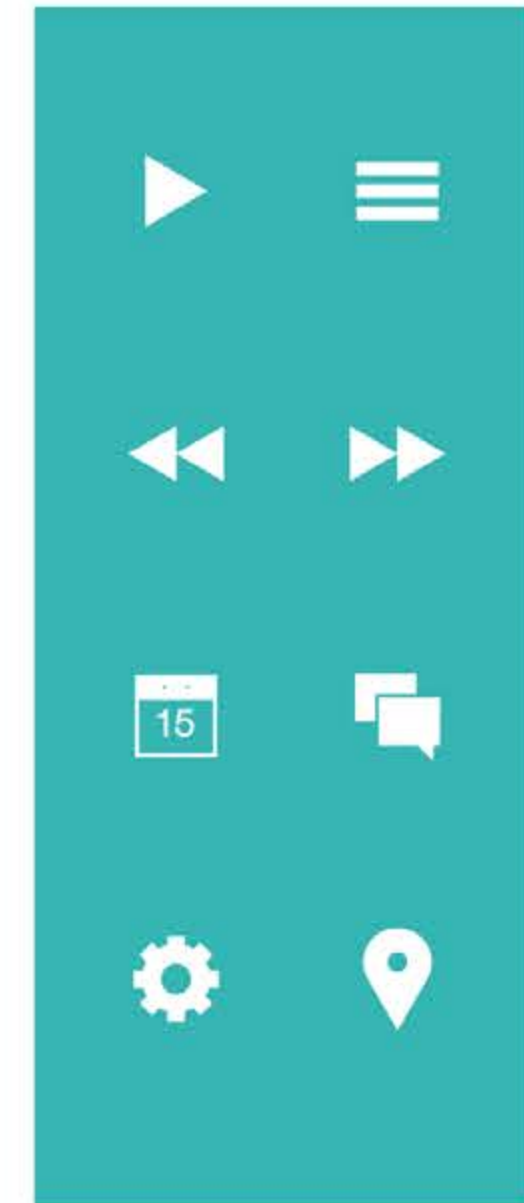
style popular, fun, interesting, happy



Texture



Full Icons



TYPOGRAPHY

QWERTYUIOPASDFGHJKLZXCVBN-
M[{}!:"<>?!@#\$\$%^&*(!)1234567890

Typeface: ITC Avant Garde Gothic



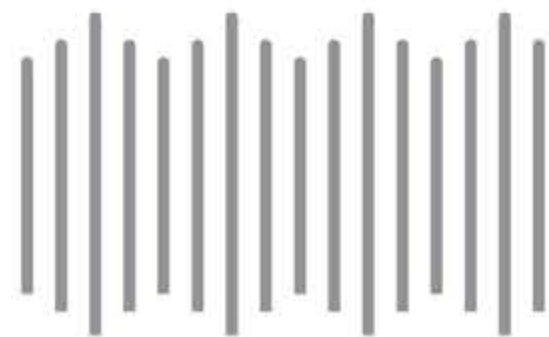
LOGO DESIGN -01-
Style: Simple and tech feel



GRAPHIC ELEMENTS



SUPPORT ELEMENTS



COLOR PALETTE



LOGO DESIGN -02-
Style: Simple and Modern look



GRAPHIC ELEMENTS



SUPPORT ELEMENTS



COLOR PALETTE



LOGO DESIGN -03-
Style: Bold and Round



HOME

Your home
in the palm
of your hand

GRAPHIC ELEMENTS

H+O+M+E

SUPPORT ELEMENTS



COLOR PALETTE



LOGO DESIGN -04-
Style: Simple and tech feel



homepilot

Your home in the palm of your hand

GRAPHIC ELEMENTS



SUPPORT ELEMENTS



COLOR PALETTE



Final

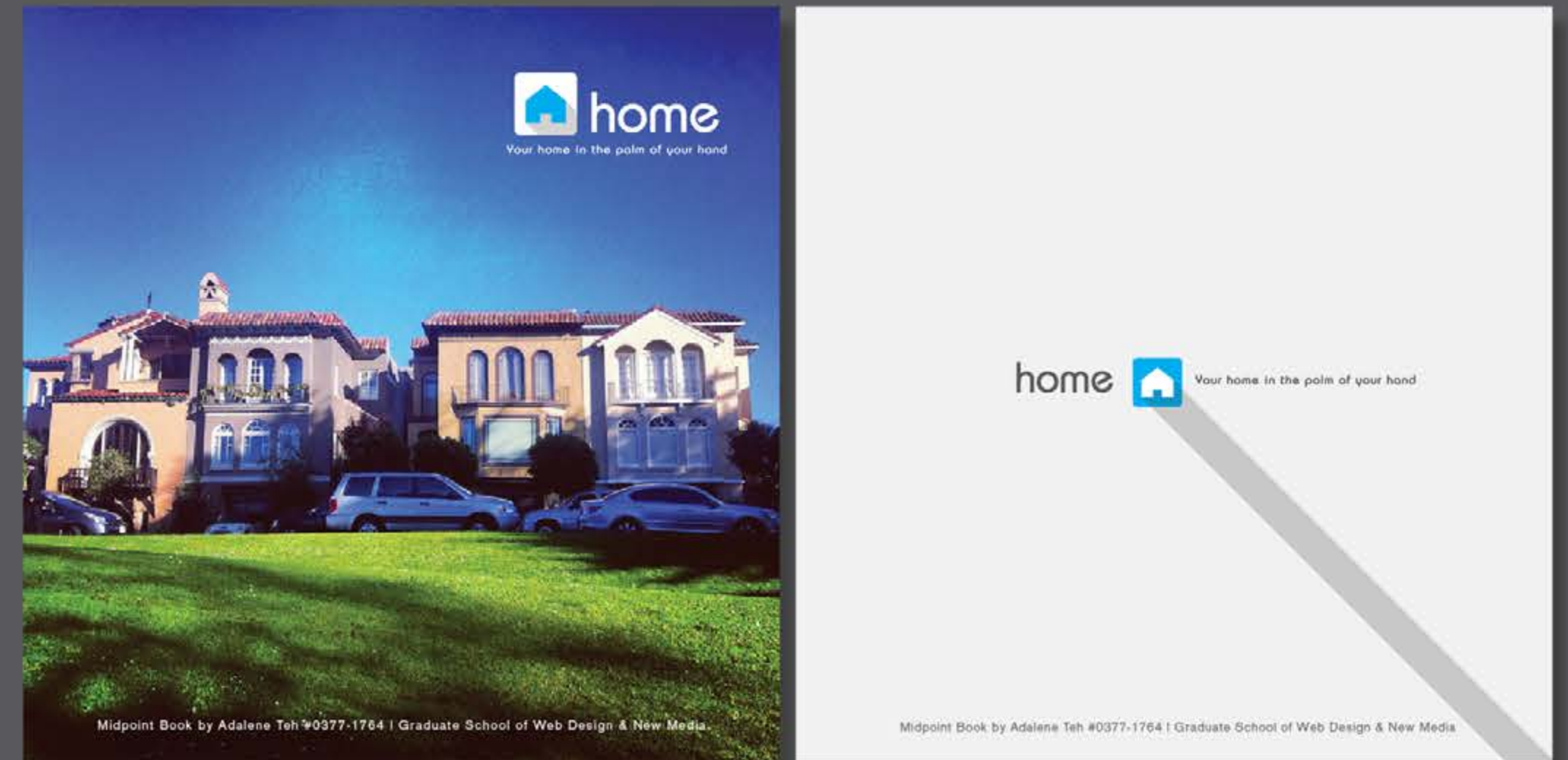
BOOK COVER DESIGN -01-

Style: Simple and tech feel



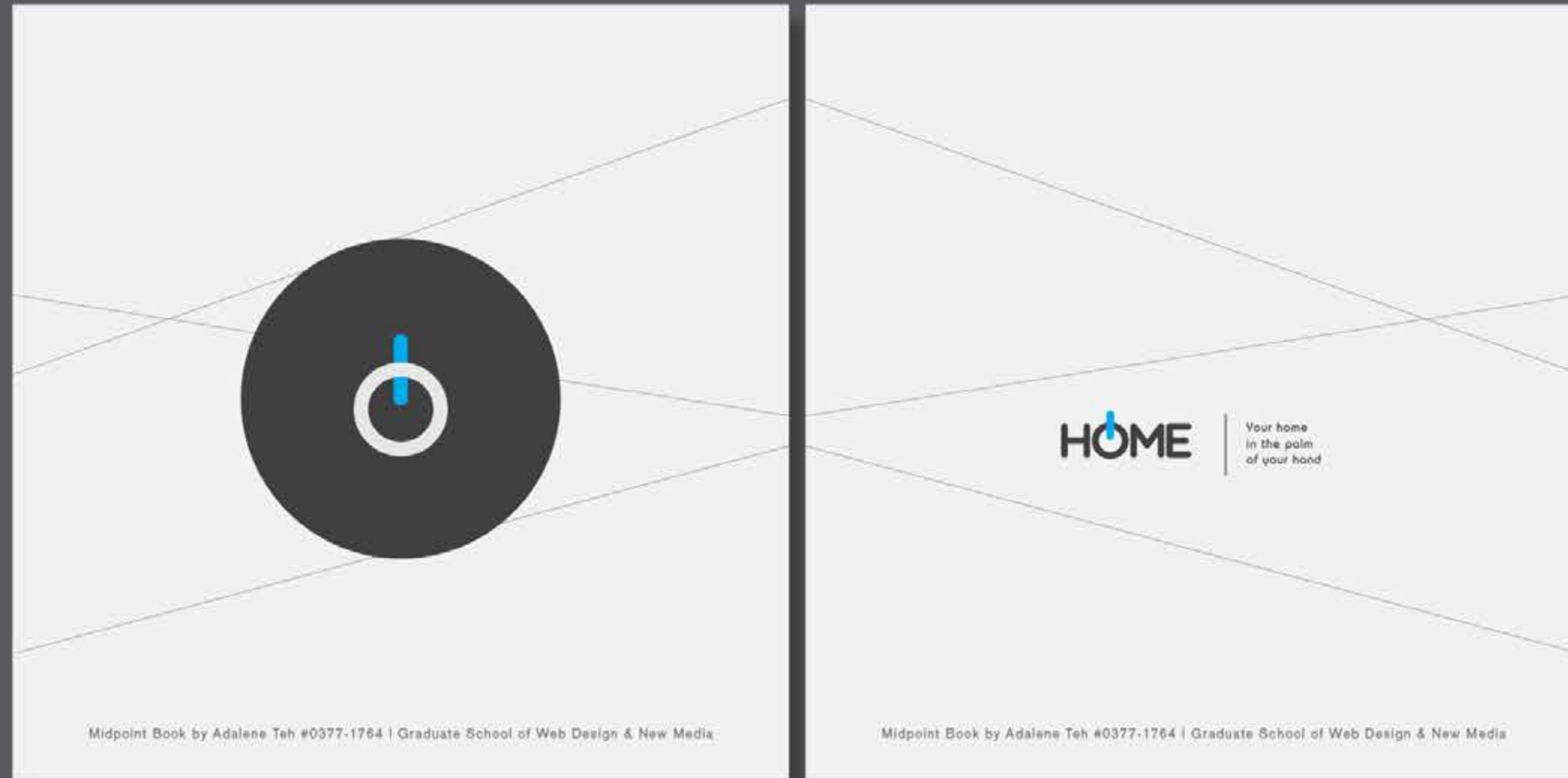
BOOK COVER DESIGN -02-

Style: Simple and Modern look



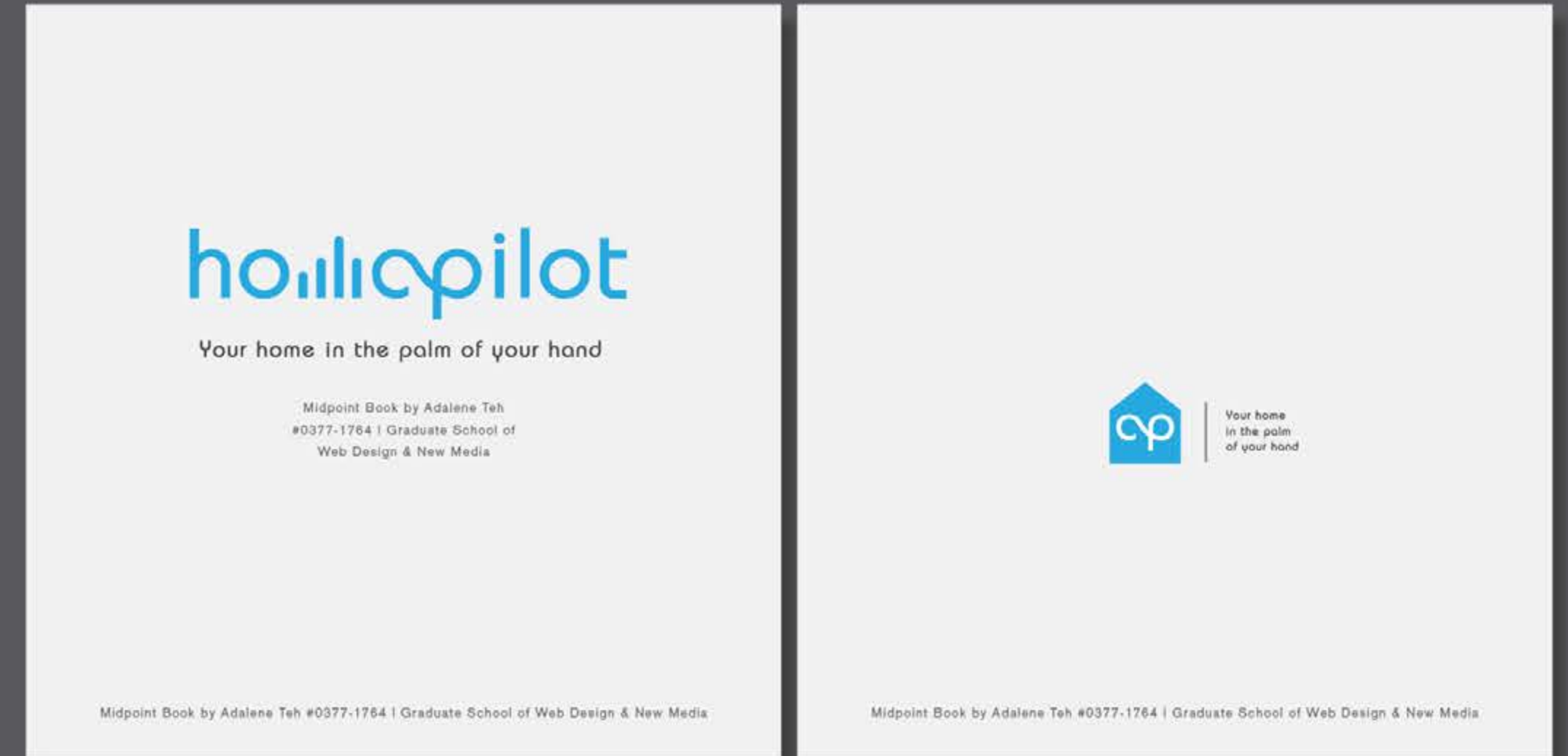
BOOK COVER DESIGN -03-

Style: Bold and Round



BOOK COVER DESIGN -04-

Style: Bold and Round



Timeline



This is about Adalene's background and education.

TIMELINE

2014 SUMMER INTERSESSION JAN 06- JAN24	GLA 601: THE RENAISSANCE ART WORLD & ITS CLASSICAL ORIGINS	Prepare Midpoint Review
SUMMER 2014 JUNE16- AUG 06	WNM 618 WEB TECH 2 WNM 663 ADV. MOTION GRAPHIC	Present Midpoint Review Proof of Concept Refine Concept
FALL 2014 SEP 4- DEC 20	WNM 801 DS: USER EXPERIENCE WNM 801 DS: SCRIPTING MOBILE APPLICATIONS WNM 900 MS: INTERNSHIP: FOR INTERNATIONAL STUDENTS WNM 250 WEB DESIGN 2 (ELECTIVE) -UNDERGRADUATE/ONLINE	User Interface Usability Testing Develop the app
SPRING 2015 JAN XX- MAYXX	WNM 801 DS: SCRIPTING INTERACTIVITY & WEB SERVICES WNM 801 DS: RESPONSIVE WEB WNM 801 DS: VISUAL DESIGN GLA 676: PROFESSIONAL PRACTICES FOR DESIGNERS & ADVERTISERS (ELECTIVE)	Usability Testing Develop the app Visual Design

Bibliography



This is about Adalene's background and education.

Conclusion



This is about Adalene's background and education.

